

EMC TEST REPORT
for

Shanghai Jenco Instruments Co., Ltd.

pH & Temperature/ORP & Temperature Pocket Meter

Model No.	618N	619	630
	pH10N	628N	ORP15N
	pH10	pH10A	ORP15
	ORP15A	--	--
Serial No.	E2009102302	E2009102303	E2009102304
	E2009102305	E2009102306	E2009102307
	--	--	--
	--	--	--

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Prepared By: Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-E09160A1
Date of Test : Oct 26-27, 2009
Date of Report: Jul 25, 2011

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TEST REPORT

Applicant : Shanghai Jenco Instruments Co., Ltd.

Telephone : +86-21-57619600

Manufacturer : Shanghai Jenco Instruments Co., Ltd.

EUT Description : pH & Temperature/ORP & Temperature Pocket Meter

(A) Model No.	618N	619	630
	pH10N	628N	ORP15N
	pH10	pH10A	ORP15
	ORP15A	--	--
(B) Serial No.	E2009102302	E2009102303	E2009102304
	E2009102305	E2009102306	E2009102307
	--	--	--
	--	--	--
(C) Power Supply	DC 6V (Button Battery*4)		

Test Standard Used:

EN 61326-1:2006 (IEC 61326-1:2005) (Basic immunity test requirement)
(IEC 61000-4-2:2001, IEC 61000-4-3:2006)

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device and the severity levels of the device endured and its performance criterion. The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of all these testing. Also, this report shows that the EUT (Equipment Under Test) to be technically compliant with the EN 61326 requirement.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

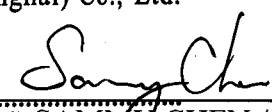
Susceptibility tests and relevant emission tests as specified in European Union EMC Directive are omitted and regarded as compliance due to the nature of the product using our engineering judgment.

Date of Test : Oct 26-27, 2009 Date of Report : Jul 25, 2011

Producer : 
 KATHY WANG / Assistant

Review : 
 DIO YANG / Assistant Manager

AUDIX[®] For and on behalf of
 Audix Technology (Shanghai) Co., Ltd.

Signatory : 
 Authorized Signature EMC SAMMY CHEN / Deputy Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below:

EMISSION (EN 61326-1:2006) (IEC 61326-1:2005)			
Description of Test Item	Standard	Limits	Results
Conducted Disturbance at Main Terminal	EN 61326-1:2006 (IEC 61326-1:2005)	N/A	N/A
Radiated Disturbance	EN 61326-1:2006 (IEC 61326-1:2005)	Class B	Pass
Harmonic Current Emission	IEC 61000-3-2:2005	N/A	N/A
Voltage Fluctuations and Flicker	IEC 61000-3-3: 2005	N/A	N/A
IMMUNITY (EN 61326-1:2006) (IEC 61326-1:2005)			
Description of Test Item	Basic Standard	Performance Criteria	Results
Electrostatic Discharge (ESD)	IEC 61000-4-2:2001	B	Pass
Radio-Frequency, Continuous Radiated Disturbance	IEC 61000-4-3:2006	A	Pass
Electrical Fast Transient (EFT)	IEC 61000-4-4:2004 +Corr.1:2006+Corr.2:2007	N/A	N/A
Surge	IEC 61000-4-5:2005	N/A	N/A
Radio-Frequency, Continuous Conducted Disturbance	IEC 61000-4-6:2006	N/A	N/A
Voltage Dips, >95% reduction	IEC 61000-4-11:2004	N/A	N/A
Voltage Dips, 60% reduction		N/A	N/A
Voltage Dips, 30% reduction		N/A	N/A
Voltage Interruptions		N/A	N/A
N/A is an abbreviation for Not Applicable.			

1.2 Description of Performance Criteria

The variety and the diversity of the apparatus within the scope of this standard make it difficult to define precise criteria for the evaluation of the immunity test results. If, as result of the application of the tests defined in this standard, the apparatus becomes dangerous or unsafe, the apparatus shall be deemed to have failed the test. A functional description and a definition of performance criteria, during or as a consequence of the EMC testing, shall be provided by the manufacturer and noted in the test report, based on the following criteria:

1.2.1 Performance criterion A

The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

1.2.2 Performance criterion B

The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

1.2.3 Performance criterion C

Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

2 GENERAL INFORMATION

2.1 Description of EUT

Description : pH & Temperature/ORP & Temperature Pocket Meter

Model No. :	618N	619	630
	pH10N	628N	ORP15N
	pH10	pH10A	ORP15
	ORP15A	--	--

Serial No. :	E2009102302	E2009102303	E2009102304
	E2009102305	E2009102306	E2009102307
	--	--	--
	--	--	--

Note #1 : The different list for all the models are as follows:

Report No.	Model No.	Rev. Summary	Edition No.	Data of Rev.
ACI-E09160	618N, 619, 630, pH10N, 628N, ORP15N	Original Report.	0	Nov 06, 2009
ACI-E09160A1	618N, 619, 630, pH10N, 628N, ORP15N, pH10, pH10A, ORP15, ORP15A	To add four new model numbers	Rev. A1	Jul 25, 2011

Note #2 : pH10N, pH10 and pH10A are all the same except for the model name, appearance and color.

Note #3 : ORP15N, ORP15 and ORP15A are all the same except for the model name, appearance and color.

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Manufacturer : Shanghai Jenco Instruments Co., Ltd.
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China.

Accuracy :

pH : $\pm 0.02\text{pH} \pm 1 \text{ LSD}$

ORP : $\pm 1\text{mV} \pm 1 \text{ LSD}$

Temperature : $\pm 0.3^\circ\text{C}$

2.2 Description of Test Facility

Site Description	: Audix Technology (Shanghai) Co., Ltd.
Name of Firm	: Audix Technology (Shanghai) Co., Ltd.
Site Location	: 3F 34Bldg 680 Guiping Rd, Caohejing Hi-Tech Park, Shanghai 200233, China
Accredited by NVLAP, Lab Code	: 200371-0
TAF Accreditation Number	: 1417
Nemko Laboratory Authorization No.	: ELA 603.

2.3 Measurement Uncertainty

Radiated Disturbance Expanded Uncertainty : U = 3.02 dB

3 TEST EQUIPMENT

3.1 For Radiated Disturbance Test

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Preamplifier	HP	8447D	2944A10548	Sep 19, 2009	Mar 19, 2010
2.	Bi-log Antenna	TESEQ	CBL6112D	23193	May 14, 2008	May 14, 2010
3.	Spectrum Analyzer	Agilent	E7405A	MY45106600	May 19, 2009	May 19, 2010
4.	Test Receiver	R&S	ESVS10	844594/001	Mar 07, 2009	Mar 07, 2010
5.	50Ω Coaxial Switch	Anritsu	MP59B	6200426390	Sep 18, 2009	Mar 18, 2010
6.	Software	Audix	E3	SET00200 9912M295-2	-	-

3.2 For Electrostatic Discharge Immunity Test

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	ESD Simulator	TESEQ	NSG 437	130	Oct 26, 2009	Oct 26, 2010

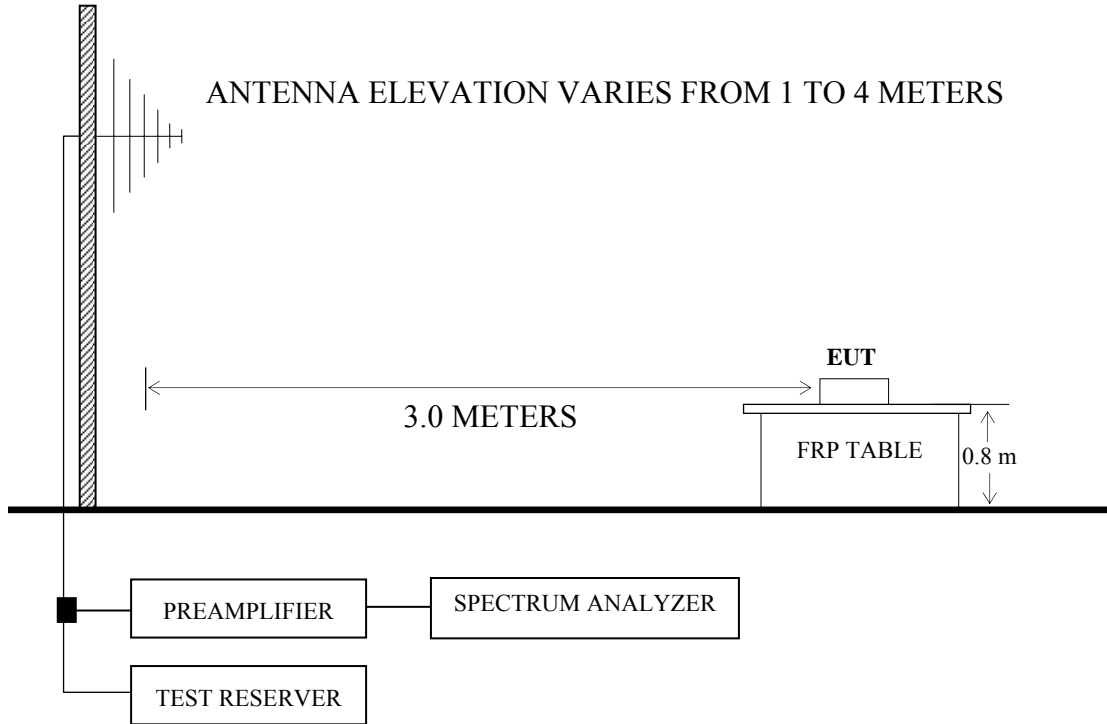
3.3 For RF Electromagnetic Field Immunity Test

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Signal Generator	Agilent	E4421B	MY43350935	Oct 26, 2009	Oct 26, 2010
2.	Power Amplifier	AR	KAW2180	10088-2	Apr 06, 2009	Apr 06, 2010
3.	Power Amplifier	Milmega	AS0104-200-200	1016528	Apr 06, 2009	Apr 06, 2010
4.	Power Meter	HP	438A	2517A02731	Apr 06, 2009	Apr 06, 2010
5.	Power Sensor	HP	8481D	3318A13765	Apr 06, 2009	Apr 06, 2010
6.	Log-Periodic Antenna	AR	AT-1080	19300	Aug 21, 2009	Aug 21, 2010
7.	High Gain Horn Antenna	AR	AT4002A	309732	Jan 24, 2009	Jan 24, 2010
8.	Field Monitor	AR	FM2000	19221	Oct 29, 2008	Oct 29, 2009
9.	Field Probe	AR	FP2036	308920	Oct 29, 2008	Oct 29, 2009
10.	Dual Directional Coupler (DDC)	AR	DC6180	19326	Sep 19, 2009	Mar 19, 2010
11.	Dual Directional Coupler (DDC)	AR	DC7144A	310049	Sep 18, 2009	Mar 18, 2010

4 RADIATED DISTURBANCE TEST

4.1 Block Diagram of Test Setup

4.1.1 Radiated emission test setup



■ : 50 ohm Coaxial Switch

4.2 Applicable Standard

EN 61326-1: 2006 (IEC 61326-1:2005) (Class B)

4.3 Limits for Radiated Disturbance

Frequency (MHz)	Distance (m)	Field Strength Limits dB(μ V/m)	Converted Field Strength Limits By 3 Meters Measuring Distance dB(μ V/m)
30 ~ 230	10	30	40
230 ~ 1000	10	37	47
<p>NOTE 1 - The tighter limit applies at the edge between two frequency bands.</p> <p>NOTE 2 – Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.</p> <p>NOTE 3 – Audix Technology (Shanghai) Co., Ltd. Only has a 3 meters Semi-anechoic Chamber to do the radiated test, therefore, Audix Shanghai used 3 meters measuring distance and converted limits to judge the EUT compliance with or not.</p>			

4.4 EUT Configuration

The EUT (listed in Sec. 2.1) was installed as shown as Sec. 4.1 to meet EN 61326 requirement and operating in a manner which tends to maximize its emission level in a normal application.

4.5 Operating Condition of EUT

- 4.5.1 Set up the EUT as shown on Sec. 4.1
- 4.5.2 Turn on the power of the EUT, and then test.
- 4.5.3 The EUT will measure the pH & temperature or ORP & temperature of the test solution.

4.6 Test Procedure

The EUT was placed upon a FRP turntable 0.8 m above the horizontal metal ground plane. The FRP turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (Calibrated Bilog Antenna) was used as receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all the interface cables were manipulated according to EN 61326-1(Class B) requirements during radiated test.

The bandwidth of R&S Test Receiver ESVS10 was set at 120 kHz.

The frequency range from 30 MHz to 1000 MHz was checked.

The test modes were done on radiated disturbance test and all the test results are listed in Sec. 4.7.

Test Mode
pH & Temperature Measuring
ORP & Temperature Measuring

4.7 Test Results

<PASS>

All the following records are the disturbance levels and the frequencies of the highest disturbances, and if the disturbance not reported below are too low against the prescribed converted 3 meters limits.

Model No	Test Mode	Page
618N	pH & Temperature Measuring	P12-P13
619	pH & Temperature Measuring	P14-P15
630	pH & Temperature Measuring	P16-P17
pH10N	pH & Temperature Measuring	P18-P19
628N	ORP & Temperature Measuring	P20-P21
ORP15N	ORP & Temperature Measuring	P22-P23

Refer to the following pages.

NOTE 1 – All reading are Quasi-Peak values.

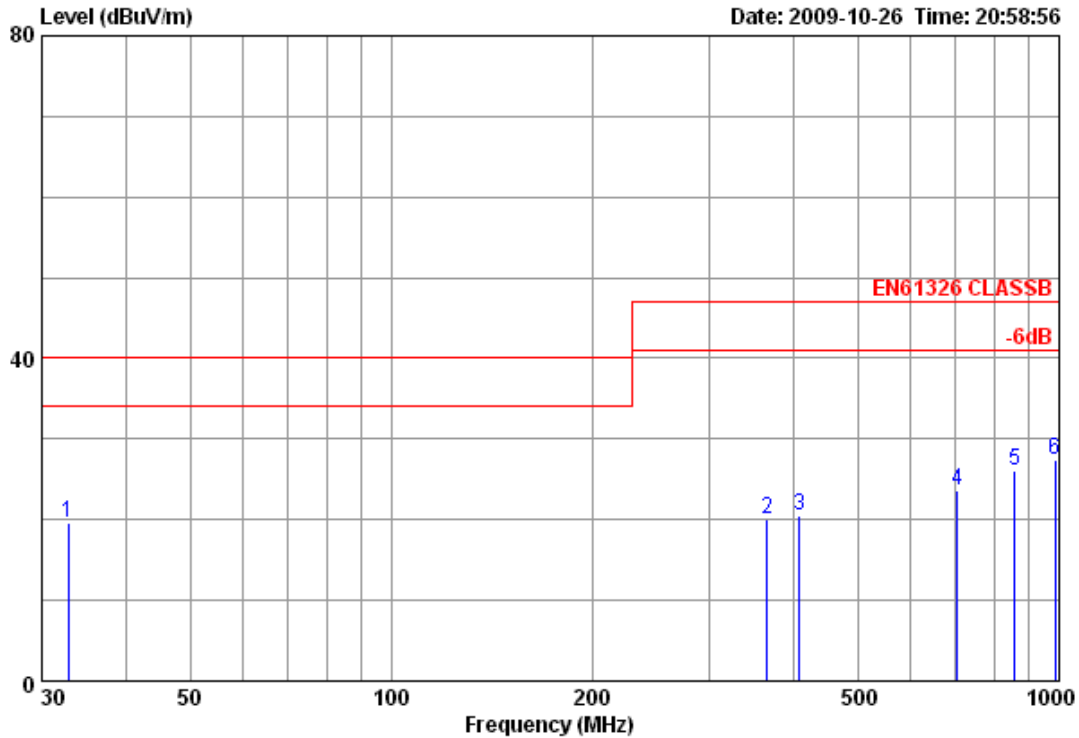
NOTE 2 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 3 – All Quasi-Peak values are background value only.



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Data: 53 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 53
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : HORIZONTAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 618N
 S/N : E2009102302
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

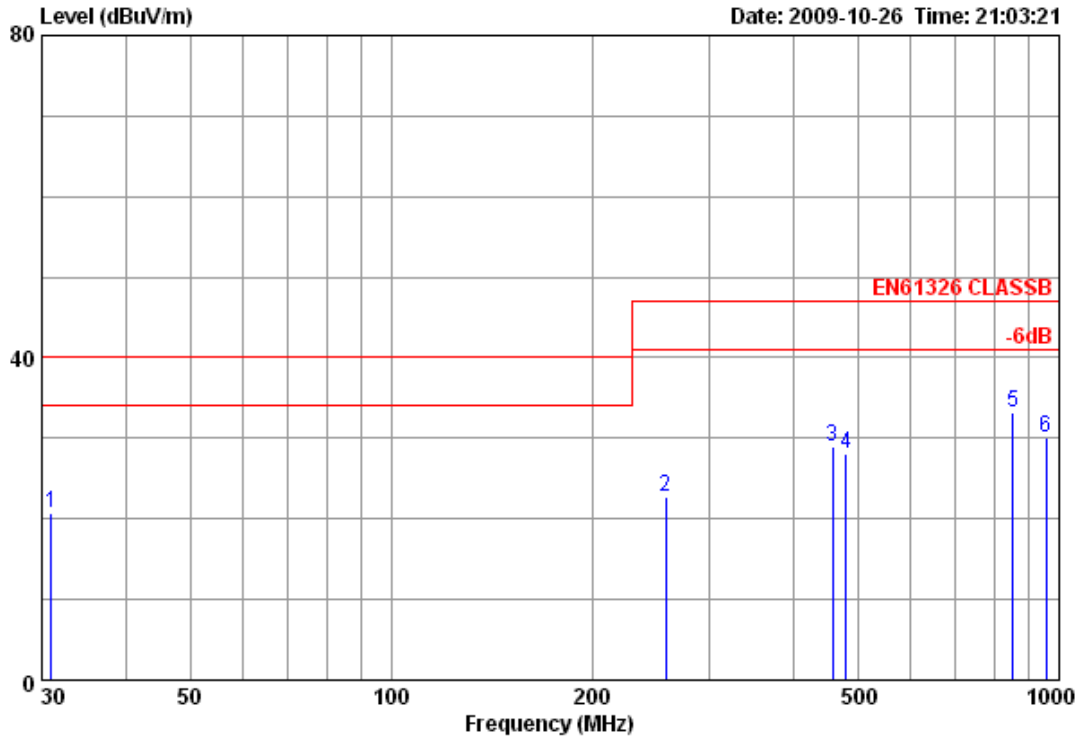
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	32.910	17.95	0.62	1.09	19.66	40.00	20.34
2	365.620	15.73	1.96	2.31	20.00	47.00	27.00
3	408.300	16.62	2.07	1.71	20.40	47.00	26.60
4	704.150	19.73	2.70	1.24	23.67	47.00	23.33
5	859.350	21.31	2.98	1.73	26.02	47.00	20.98
6	985.450	22.30	3.22	1.85	27.37	47.00	19.63

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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Data: 54 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 54
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : VERTICAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 618N
 S/N : E2009102302
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

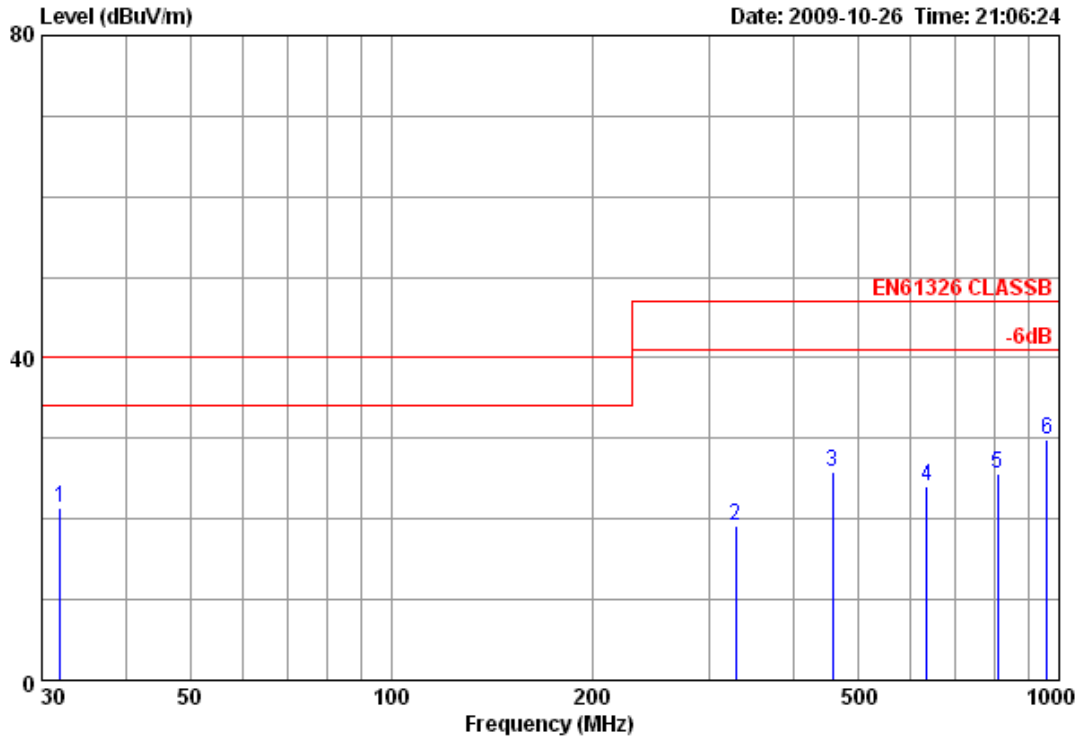
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.970	19.03	0.62	1.03	20.68	40.00	19.32
2	257.950	13.06	1.61	8.09	22.76	47.00	24.24
3	457.770	17.35	2.15	9.52	29.02	47.00	17.98
4	479.110	17.65	2.20	8.23	28.08	47.00	18.92
5	851.590	21.24	2.96	8.94	33.14	47.00	13.86
6	955.380	22.11	3.14	4.75	30.00	47.00	17.00

Remarks: 1.Emission Level= Antenna Factor + Cable Loss + Reading.
 2.The emission levels that are 20dB below the official limits are not report.



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Data: 55 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 55
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : HORIZONTAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 619
 S/N : E2009102303
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

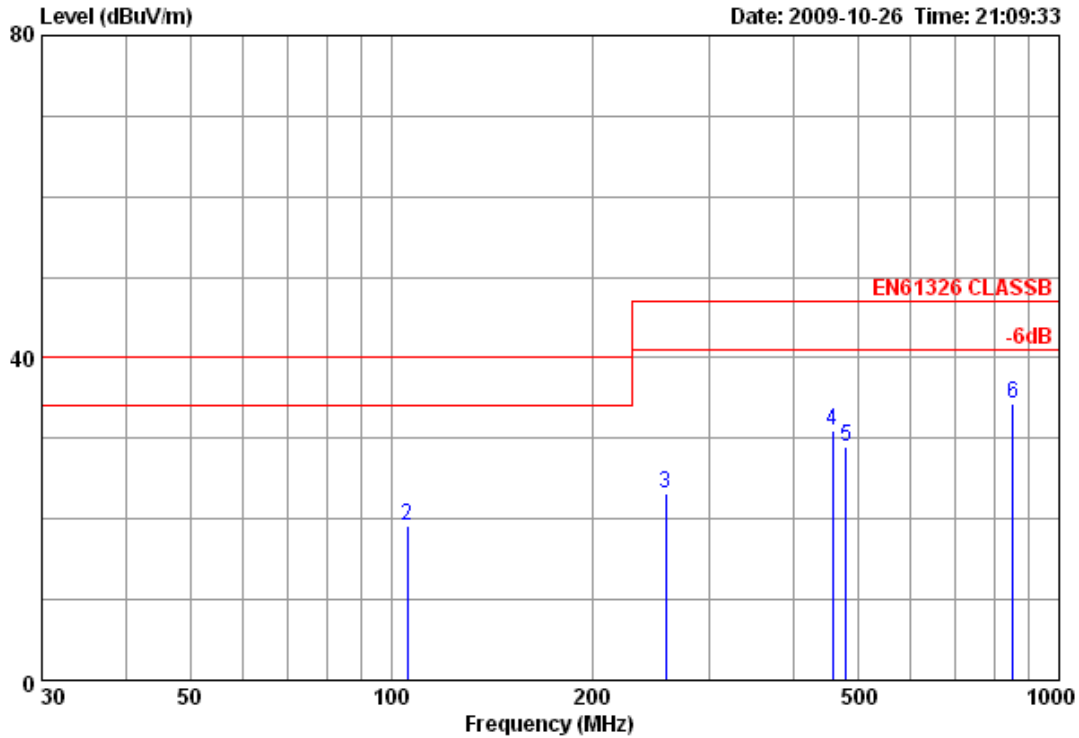
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	31.940	18.49	0.62	2.37	21.48	40.00	18.52
2	327.790	14.66	1.85	2.75	19.26	47.00	27.74
3	457.770	17.35	2.15	6.30	25.80	47.00	21.20
4	634.310	19.38	2.57	2.13	24.08	47.00	22.92
5	809.880	20.80	2.87	1.86	25.53	47.00	21.47
6	959.260	22.13	3.15	4.69	29.97	47.00	17.03

Remarks: 1.Emission Level= Antenna Factor + Cable Loss + Reading.
 2.The emission levels that are 20dB below the official limits are not report.



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Data: 56 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 56
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : VERTICAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 619
 S/N : E2009102303
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

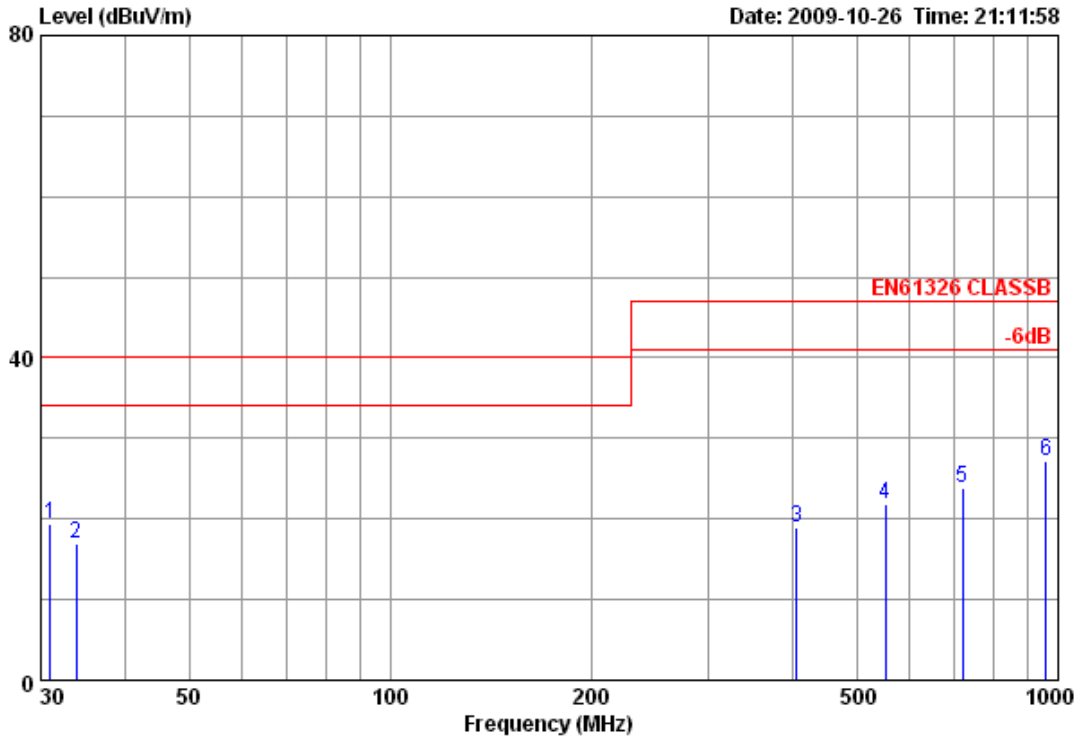
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.000	19.60	0.62	1.32	21.54	40.00	18.46
2	105.660	11.95	1.10	6.22	19.27	40.00	20.73
3	257.950	13.06	1.61	8.60	23.27	47.00	23.73
4	457.770	17.35	2.15	11.43	30.93	47.00	16.07
5	479.110	17.65	2.20	9.12	28.97	47.00	18.03
6	851.590	21.24	2.96	10.04	34.24	47.00	12.76

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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Data: 57 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 57
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : HORIZONTAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 630
 S/N : E2009102304
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

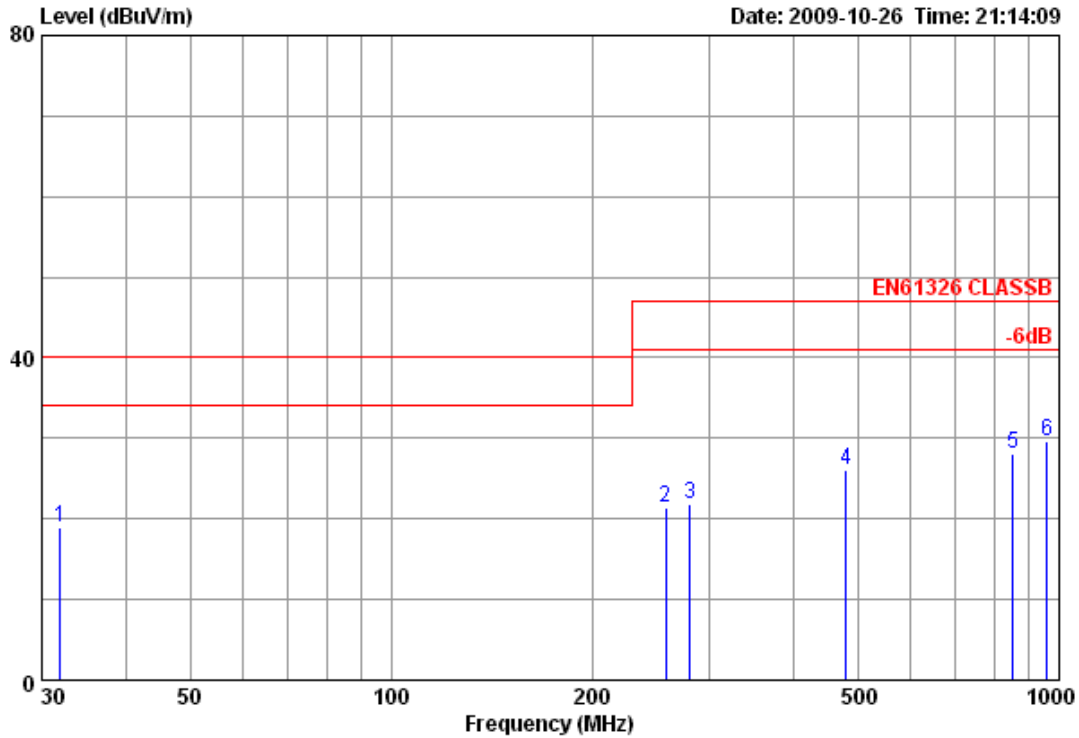
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.970	19.03	0.62	-0.15	19.50	40.00	20.50
2	33.880	17.44	0.64	-1.15	16.93	40.00	23.07
3	406.360	16.59	2.05	0.37	19.01	47.00	27.99
4	550.890	18.58	2.40	0.78	21.76	47.00	25.24
5	718.700	19.88	2.74	1.16	23.78	47.00	23.22
6	959.260	22.13	3.15	2.01	27.29	47.00	19.71

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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Data: 58 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 58
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : VERTICAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 630
 S/N : E2009102304
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

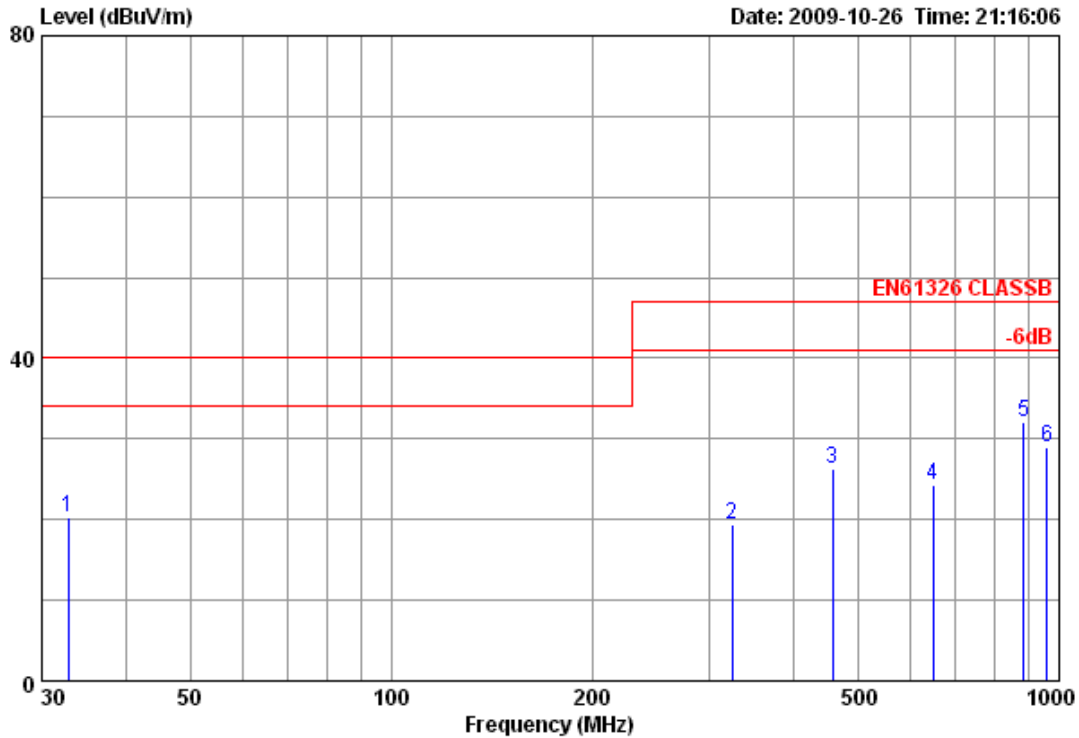
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)
1	31.940	18.49	0.62	-0.15	18.96	40.00	21.04
2	257.950	13.06	1.61	6.63	21.30	47.00	25.70
3	280.260	13.55	1.68	6.53	21.76	47.00	25.24
4	479.110	17.65	2.20	6.28	26.13	47.00	20.87
5	851.590	21.24	2.96	3.92	28.12	47.00	18.88
6	960.230	22.13	3.15	4.43	29.71	47.00	17.29

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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 audixaci@audix.com

Data: 59 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 59
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : HORIZONTAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : pH10N
 S/N : E2009102305
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

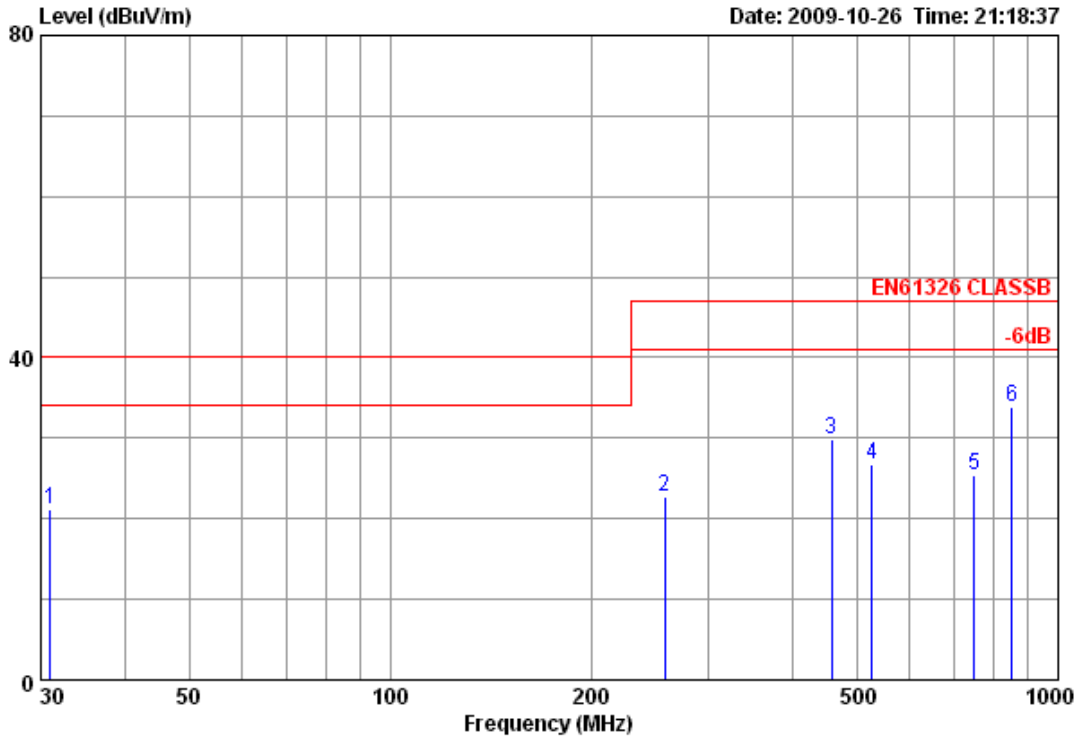
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	32.910	17.95	0.62	1.76	20.33	40.00	19.67
2	323.910	14.58	1.84	2.88	19.30	47.00	27.70
3	457.770	17.35	2.15	6.89	26.39	47.00	20.61
4	646.920	19.44	2.58	2.17	24.19	47.00	22.81
5	885.540	21.56	3.03	7.51	32.10	47.00	14.90
6	959.260	22.13	3.15	3.62	28.90	47.00	18.10

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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 audixaci@audix.com

Data: 60 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 60
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASS B Ant. pol. : VERTICAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : pH10N
 S/N : E2009102305
 Power Rating: DC 6V
 Test Mode : PH&Temperature Measuring

	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.970	19.03	0.62	1.57	21.22	40.00	18.78
2	257.950	13.06	1.61	8.08	22.75	47.00	24.25
3	457.770	17.35	2.15	10.27	29.77	47.00	17.23
4	526.640	18.24	2.33	6.07	26.64	47.00	20.36
5	747.800	20.20	2.78	2.51	25.49	47.00	21.51
6	851.590	21.24	2.96	9.67	33.87	47.00	13.13

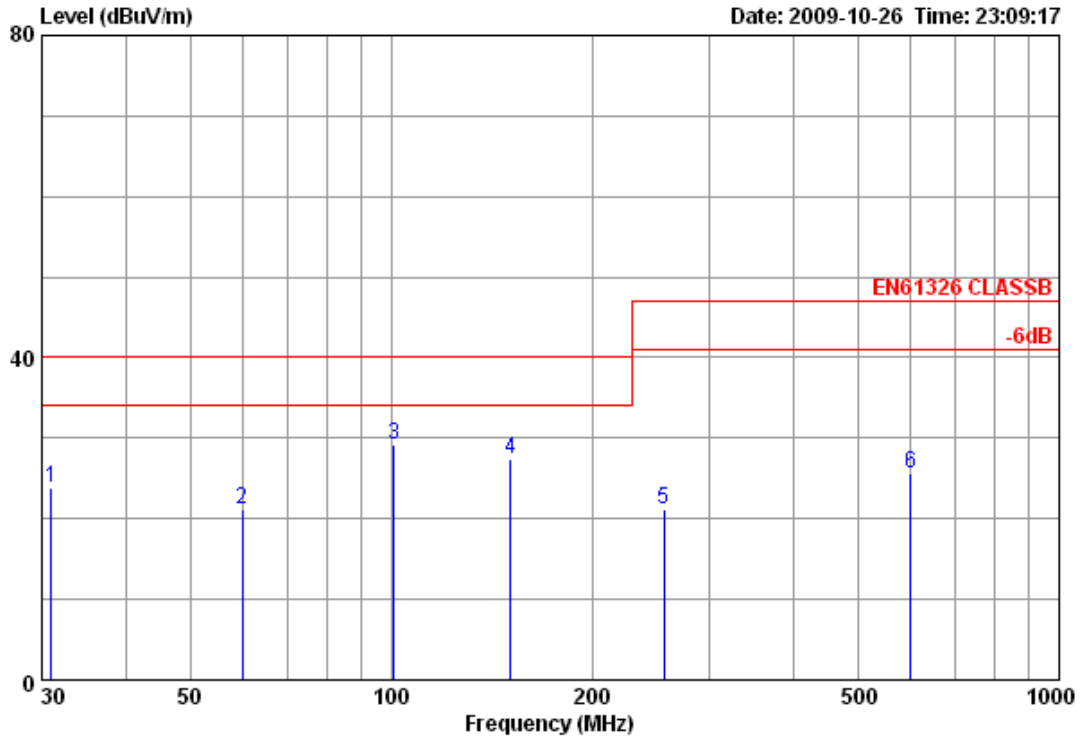
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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Data: 75 File: D:\Test-Data\R\renshi2008.EM6 (80)

Date: 2009-10-26 Time: 23:09:17



Site no : Audix ACI (3m Chamber) Data no. : 75
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASS B Ant. pol. : HORIZONTAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 628N
 S/N : E2009102306
 Power Rating: DC 6V
 Test Mode : ORP & Temperature Measuring

	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	30.970	19.03	0.62	4.23	23.88	40.00	16.12
2	59.970	6.60	0.80	13.84	21.24	40.00	18.76
3	100.970	11.57	1.05	16.61	29.23	40.00	10.77
4	150.790	11.25	1.23	15.03	27.51	40.00	12.49
5	256.400	13.03	1.61	6.56	21.20	47.00	25.80
6	598.700	19.20	2.46	3.95	25.61	47.00	21.39

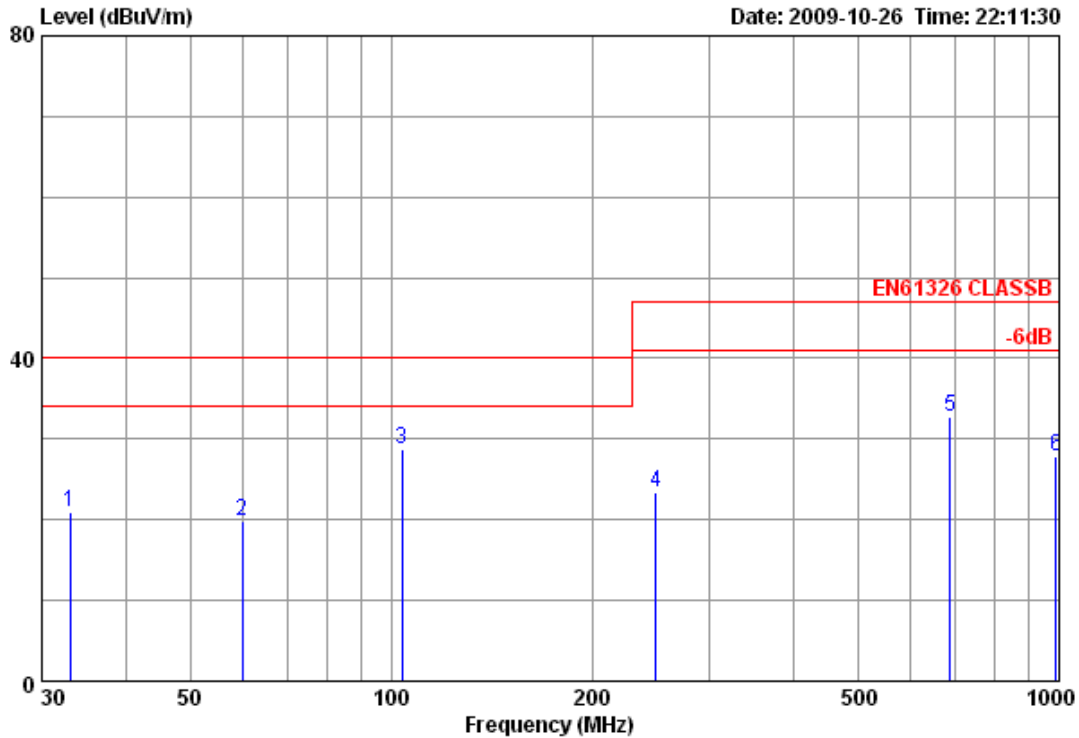
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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 audixaci@audix.com

Data: 76 File: D:\Test-Data\R\renshi2008.EM6 (80)

Date: 2009-10-26 Time: 22:11:30



Site no : Audix ACI (3m Chamber) Data no. : 76
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASSB Ant. pol. : VERTICAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : 628N
 S/N : E2009102306
 Power Rating: DC 6V
 Test Mode : ORP & Temperature Measuring

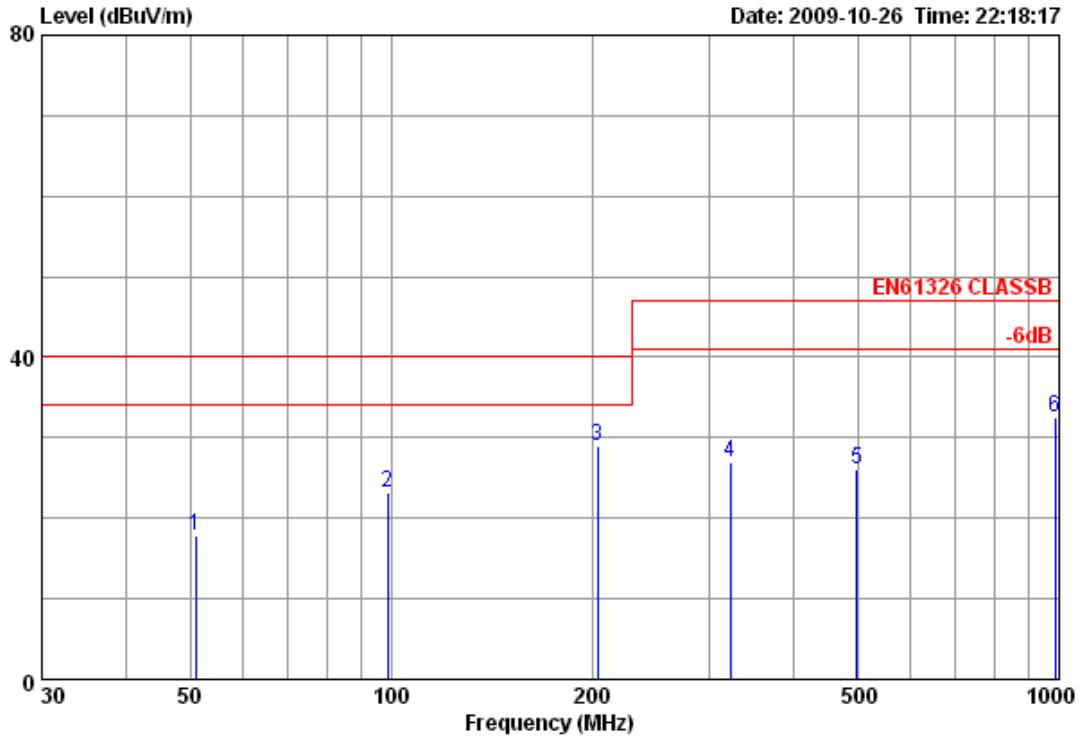
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	33.090	17.87	0.62	2.48	20.97	40.00	19.03
2	59.970	6.60	0.80	12.42	19.82	40.00	20.18
3	103.790	11.80	1.07	15.77	28.64	40.00	11.36
4	249.470	12.86	1.61	8.83	23.30	47.00	23.70
5	687.490	19.65	2.66	10.35	32.66	47.00	14.34
6	987.790	22.32	3.20	2.26	27.78	47.00	19.22

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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 audixaci@audix.com

Data: 77 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 77
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASS B Ant. pol. : HORIZONTAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : ORP15N
 S/N : E2009102307
 Power Rating: DC 6V
 Test Mode : ORP & Temperature Measuring

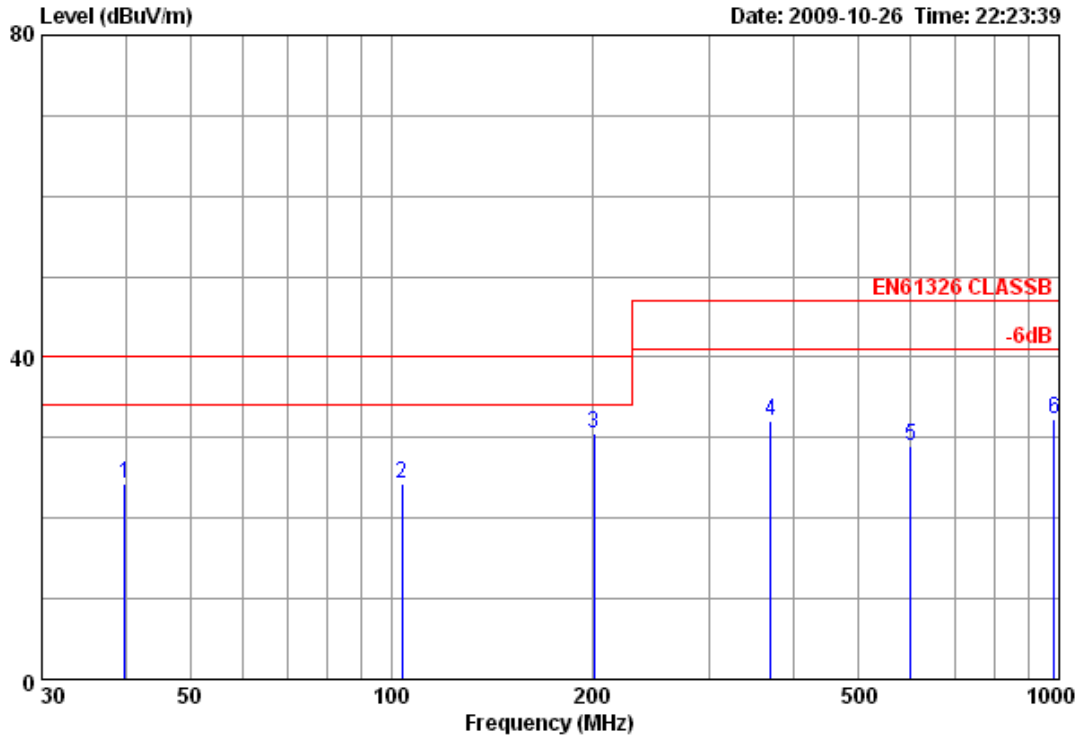
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	50.970	8.71	0.76	8.37	17.84	40.00	22.16
2	98.790	11.27	1.04	10.78	23.09	40.00	16.91
3	203.479	10.85	1.47	16.66	28.98	40.00	11.02
4	321.900	14.50	1.84	10.61	26.95	47.00	20.05
5	498.700	17.88	2.27	5.96	26.11	47.00	20.89
6	986.420	22.32	3.21	6.96	32.49	47.00	14.51

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.



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 audixaci@audix.com

Data: 78 File: D:\Test-Data\R\renshi2008.EM6 (80)



Site no : Audix ACI (3m Chamber) Data no. : 78
 Dis. / Ant. : 3m /CBL 6112D-2008.05.14
 Limit : EN61326 CLASS B Ant. pol. : VERTICAL
 Env. / Ins. : 22'C 60%RH ESVS10 Engineer : Raven
 EUT : pH & Temperature/ORP & Temperature Pocket Meter
 M/N : ORP15N
 S/N : E2009102307
 Power Rating: DC 6V
 Test Mode : ORP & Temperature Measuring

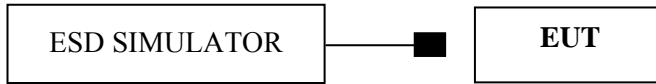
	Freq. (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	39.970	13.99	0.68	9.51	24.18	40.00	15.82
2	103.790	11.80	1.07	11.40	24.27	40.00	15.73
3	200.970	10.74	1.45	18.24	30.43	40.00	9.57
4	369.700	15.84	1.97	14.38	32.19	47.00	14.81
5	598.700	19.20	2.46	7.42	29.08	47.00	17.92
6	982.970	22.30	3.19	6.85	32.34	47.00	14.66

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limits are not report.

5 ELECTROSTATIC DISCHARGE IMMUNITY TEST

5.1 Block Diagram of Test Setup

5.1.1 Test setup



5.2 Applicable Standard

EN 61326-1: 2006 (IEC 61326-1:2005)
 (IEC 61000-4-2:2001, Contact Discharge: 2kV, 4kV, Air Discharge: 2kV, 4kV)

5.3 Severity Levels and Performance Criterion

5.3.1 Severity levels

Level	Test Voltage	
	Contact Discharge (kV)	Air Discharge (kV)
1.	2	2
2.	4	4
3.	6	8
4.	8	15
X	Special	Special

5.3.2 Performance criterion: A

5.4 EUT Configuration

The configuration of the EUT is same as Sec.4.4 except for the test setup replaced by Sec.5.1.

5.5 Operating Condition of EUT

- 5.5.1 Setup the EUT on a reference plane in a shielded room as Sec.5.1.
- 5.5.2 Single discharges are applied on the most sensitive points of the EUT, and the horizontal and vertical coupling plane at points on each side of the EUT.
- 5.5.3 Check the effects of this test.
- 5.5.4 The test modes are as follows:

Test Mode
pH & Temperature Measuring
ORP & Temperature Measuring

5.6 Test Procedure

The test applied a non-conductive surface and a horizontal coupling plane on a wooden table, 0.8 m high, standing on the reference ground plane, which is a 2 m x 3 m metallic sheet with 1.5 mm thickness. This reference ground plane projected beyond the EUT by at least 0.5 m on all sides and the minimum distance between the EUT and all other conductive structure, except the ground plane beneath the EUT, was more than 1.0 m.

5.6.1 Contact Discharge

The tip of the discharge electrode should touch the EUT, before the discharge switch was operated.

5.6.2 Horizontal Coupling Plane (HCP)

More than 10 single discharges were applied at the front edge of each HCP opposite the center point of the EUT and 0.1mm from vertically the front of the EUT. Discharge to the HCP were made horizontal to the edge of the HCP.

5.6.3 Vertical Coupling Plane (VCP)

More than 10 single discharges were applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5 m x 0.5 m, was placed parallel to, and positioned at a distance of 0.1 m from the EUT. Discharges were applied to the coupling plane, with this plane in sufficient different positions that all sides of the EUT were completely illuminated.

5.6.4 Air Discharge

The round discharge tip of the discharge electrode was approached as fast as possible to touch the EUT. After each discharge, the ESD simulator (discharge electrode) was removed from the EUT. The simulator was then re-triggered for a new single discharge and applies more than 10 times on each reselected point. This procedure was repeated until the air discharge completed.

5.7 Test Results

<PASS>

Refer to the following pages.

Electrostatic Discharge Immunity Test Result

Audix Technology (Shanghai) Co., Ltd.

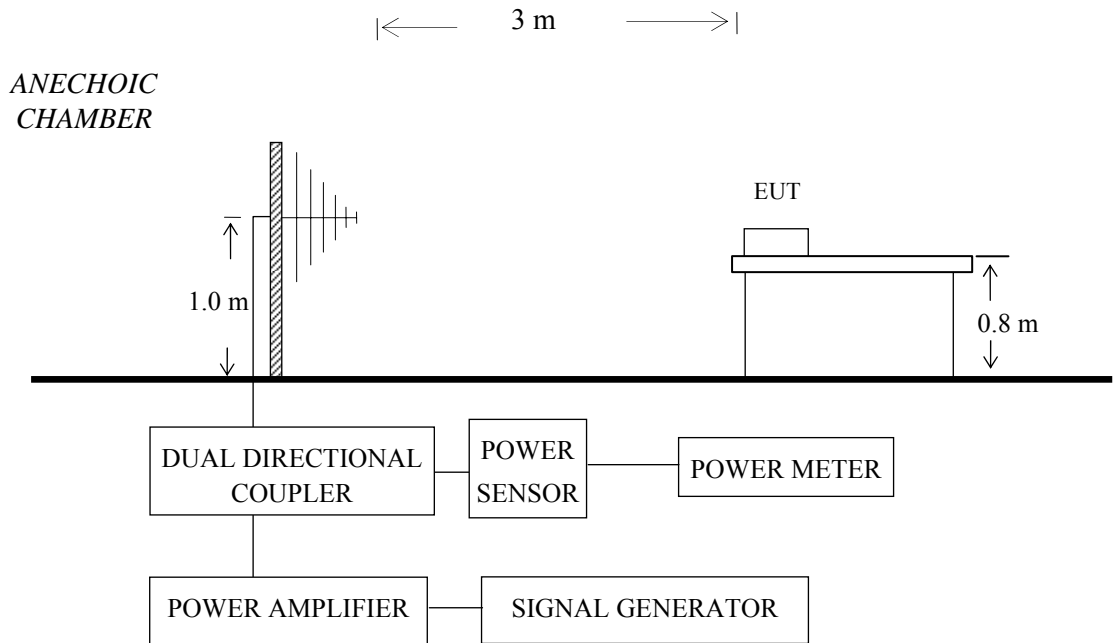
Applicant : Shanghai Jenco Instruments Co., Ltd. <hr/> EUT : pH & Temperature/ORP & Temperature Pocket Meter <hr/> M/N : 618N, 619, 630, pH10N, 628N, ORP15N <hr/> S/N : E2009102302, E2009102303, E2009102304, E2009102305, E2009102306, E2009102307 <hr/> Power Supply : DC 6V	Test Date : Oct 27, 2009 <hr/> Temperature : 23°C <hr/> Humidity : 58% <hr/> Atmospheric Pressure : 101.3kPa <hr/> Test Mode : Refer to Sec.5.5.4		
Air Discharge Voltage: ± 2kV, 4kV Contact Discharge Voltage: ± 2kV, 4kV Contact Discharge: For each point positive 10 times and negative 10 times discharge Air Discharge: For each point positive 10 times and negative 10 times discharge			
Location	Point(s)	Kind	Result
Around the EUT	4	C (HCP)	PASS
Around the EUT	4	C (VCP)	PASS
NOTE 1 – A (<u>A</u> ir Discharge), C (<u>C</u> ontact Discharge) NOTE 2 – HCP (<u>H</u> orizontal <u>C</u> oupling <u>P</u> lane), VCP (<u>V</u> ertical <u>C</u> oupling <u>P</u> lane) NOTE 3 – During the test, the pH value changed 0.01pH; the ORP value changed 1mV, the temperature value didn't change.			
Test Equipment: <input checked="" type="checkbox"/> ESD Simulator : TESEQ NSG 437			

TEST ENGINEER: LEO XUE

6 RF ELECTROMAGNETIC FIELD IMMUNITY TEST

6.1 Block Diagram of Test Setup

6.1.1 Test setup



6.2 Applicable Standard

EN 61326-1: 2006 (IEC 61326-1:2005)

(IEC 61000-4-3:2006,

Field Strength: 3 V/m, Test Value : 80-1000 MHz and 1400-2000MHz, Modulation: 80% AM 1 kHz;

Field Strength: 1 V/m, Test Value : 2000-2700Hz, Modulation: 80% AM 1 kHz)

6.3 Severity Levels and Performance Criterion

6.3.1 Severity levels

Level	Field Strength V/m
1.	1
2.	3
3.	10
X	Special

6.3.2 Performance criterion: A

6.4 EUT Configuration

Same as Sec. 4.4

6.5 Operating Condition of EUT

- 6.5.1 Setup the EUT and sensor on the table in an anechoic chamber as Sec.6.1, and operated them as Sec.4.5.
- 6.5.2 The test was performed with the transmitting antenna facing each side of the EUT.
- 6.5.3 Check the effects of the test.
- 6.5.4 The test modes are as follows:

Test Mode
pH & Temperature Measuring
ORP & Temperature Measuring

6.6 Test Procedure

The EUT and sensor were placed on a wooden table, 0.8 m high, standing on the ground reference plane.

The power meter was used to measure the forward power. The EUT was set 3 m from the transmitting antenna. Both horizontal and vertical polarization of the antenna was set on test. Each side of the EUT was faced to the transmitting antenna and measured individually.

A CCD camera was put inside the chamber and through its display to monitor the operational situation of the EUT to judge the EUT performance criterion during test.

The frequency range is swept from 80 MHz to 1000 MHz and 1400 MHz to 2700MHz.

All the scanning conditions are as follows:

Condition of Test	Remarks		
Fielded Strength	3 V/m (Severity Level 2)		1 V/m (Severity Level 1)
Modulation	80% AM 1 kHz		
Scanning Frequency	80 – 1000 MHz	1400 – 2000 MHz	2000 – 2700 MHz
Dwell Time	3 sec.		

6.7 Test Results

<PASS>

Refer to the following pages.

RF Field Strength Susceptibility Immunity Test Result

Audix Technology (Shanghai) Co., Ltd.

Applicant : <u>Shanghai Jenco Instruments Co., Ltd.</u> EUT : <u>pH & Temperature/ORP & Temperature Pocket Meter</u> M/N : <u>618N, 619, 630, pH10N, 628N, ORP15N</u> S/N : <u>E2009102302, E2009102303, E2009102304, E2009102305, E2009102306, E2009102307</u> Power Supply : <u>DC 6V</u> Test Mode : <u>Refer to Sec.6.5.4</u>	Test Date : <u>Oct 26, 2009</u> Temperature : <u>23°C</u> Humidity : <u>42%</u> Atmospheric Pressure : <u>101.3kPa</u> Field Strength : <u>3 V/m</u> Modulation : <input type="checkbox"/> Pulse <input checked="" type="checkbox"/> AM					
Frequency Range	80 MHz to 1000 MHz	1400 MHz to 2000 MHz				
Modulation	80% AM 1 kHz		80% AM 1 kHz			
Steps	1 %		1 %			
Antenna Polarization	Horizontal	Vertical	Horizontal	Vertical		
EUT Position	Front	PASS	PASS	PASS	PASS	
	Rear	PASS	PASS	PASS	PASS	
	Right	PASS	PASS	PASS	PASS	
	Left	PASS	PASS	PASS	PASS	
	Floor	--	--	--	--	
	Top	--	--	--	--	
NOTE 1- "--" means the item is no applicable. NOTE 2- During the test, the pH & ORP & Temperature value didn't change.						
Test equipment: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Signal Generator : Agilent E4421B <input checked="" type="checkbox"/> Power Amplifier : AR KAW2180 <input checked="" type="checkbox"/> Power Meter : HP 438A <input checked="" type="checkbox"/> Log-Periodic Antenna : AR AT-1080 <input checked="" type="checkbox"/> High Gain Horn Antenna: AR AT-4002A </td> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> DDC : AR DC6180 <input checked="" type="checkbox"/> DDC : AR DC7144A <input checked="" type="checkbox"/> Power Sensor : HP 8481D <input checked="" type="checkbox"/> Field Probe : AR FP2036 <input checked="" type="checkbox"/> Field Monitor : AR FM2000 </td> </tr> </table>					<input checked="" type="checkbox"/> Signal Generator : Agilent E4421B <input checked="" type="checkbox"/> Power Amplifier : AR KAW2180 <input checked="" type="checkbox"/> Power Meter : HP 438A <input checked="" type="checkbox"/> Log-Periodic Antenna : AR AT-1080 <input checked="" type="checkbox"/> High Gain Horn Antenna: AR AT-4002A	<input checked="" type="checkbox"/> DDC : AR DC6180 <input checked="" type="checkbox"/> DDC : AR DC7144A <input checked="" type="checkbox"/> Power Sensor : HP 8481D <input checked="" type="checkbox"/> Field Probe : AR FP2036 <input checked="" type="checkbox"/> Field Monitor : AR FM2000
<input checked="" type="checkbox"/> Signal Generator : Agilent E4421B <input checked="" type="checkbox"/> Power Amplifier : AR KAW2180 <input checked="" type="checkbox"/> Power Meter : HP 438A <input checked="" type="checkbox"/> Log-Periodic Antenna : AR AT-1080 <input checked="" type="checkbox"/> High Gain Horn Antenna: AR AT-4002A	<input checked="" type="checkbox"/> DDC : AR DC6180 <input checked="" type="checkbox"/> DDC : AR DC7144A <input checked="" type="checkbox"/> Power Sensor : HP 8481D <input checked="" type="checkbox"/> Field Probe : AR FP2036 <input checked="" type="checkbox"/> Field Monitor : AR FM2000					

TEST ENGINEER: KEN XU

RF Field Strength Susceptibility Immunity Test Result

Audix Technology (Shanghai) Co., Ltd.

Applicant : <u>Shanghai Jenco Instruments Co., Ltd.</u> EUT : <u>pH & Temperature/ORP & Temperature Pocket Meter</u> M/N : <u>618N, 619, 630, pH10N, 628N, ORP15N</u> S/N : <u>E2009102302, E2009102303, E2009102304, E2009102305, E2009102306, E2009102307</u> Power Supply : <u>DC 6V</u> Test Mode : <u>Refer to Sec.6.5.4</u>	Test Date : <u>Oct 26, 2009</u> Temperature : <u>23°C</u> Humidity : <u>42%</u> Atmospheric Pressure : <u>101.3kPa</u> Field Strength : <u>1 V/m</u> Modulation : <input type="checkbox"/> Pulse <input checked="" type="checkbox"/> AM					
Frequency Range	2000 MHz to 2700 MHz	900 MHz				
Modulation	80% AM 1 kHz		--			
Steps	1 %		--			
Antenna Polarization	Horizontal	Vertical	Horizontal	Vertical		
EUT Position	Front	PASS	PASS	--	--	
	Rear	PASS	PASS	--	--	
	Right	PASS	PASS	--	--	
	Left	PASS	PASS	--	--	
	Floor	--	--	--	--	
	Top	--	--	--	--	
NOTE 1- "--" means the item is no applicable. NOTE 2- During the test, the pH & ORP & Temperature value didn't change.						
Test equipment: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Signal Generator : Agilent E4421B <input checked="" type="checkbox"/> Power Meter : HP 438A <input checked="" type="checkbox"/> Power Amplifier : Milmega AS0104-200-200 <input checked="" type="checkbox"/> High Gain Horn Antenna: AR AT-4002A </td> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> DDC : AR DC7144A <input checked="" type="checkbox"/> Power Sensor : HP 8481D <input checked="" type="checkbox"/> Field Probe : AR FP2036 <input checked="" type="checkbox"/> Field Monitor : AR FM2000 </td> </tr> </table>					<input checked="" type="checkbox"/> Signal Generator : Agilent E4421B <input checked="" type="checkbox"/> Power Meter : HP 438A <input checked="" type="checkbox"/> Power Amplifier : Milmega AS0104-200-200 <input checked="" type="checkbox"/> High Gain Horn Antenna: AR AT-4002A	<input checked="" type="checkbox"/> DDC : AR DC7144A <input checked="" type="checkbox"/> Power Sensor : HP 8481D <input checked="" type="checkbox"/> Field Probe : AR FP2036 <input checked="" type="checkbox"/> Field Monitor : AR FM2000
<input checked="" type="checkbox"/> Signal Generator : Agilent E4421B <input checked="" type="checkbox"/> Power Meter : HP 438A <input checked="" type="checkbox"/> Power Amplifier : Milmega AS0104-200-200 <input checked="" type="checkbox"/> High Gain Horn Antenna: AR AT-4002A	<input checked="" type="checkbox"/> DDC : AR DC7144A <input checked="" type="checkbox"/> Power Sensor : HP 8481D <input checked="" type="checkbox"/> Field Probe : AR FP2036 <input checked="" type="checkbox"/> Field Monitor : AR FM2000					

TEST ENGINEER: KEN XU

7 DEVIATION TO TEST SPECIFICATIONS

None.

8 PHOTOGRAPH

8.1 Radiated Disturbance Test



FRONT VIEW OF RADIATED EMISSION TEST



BACK VIEW OF RADIATED EMISSION TEST

8.2 Electrostatic Discharge Immunity Test



HORIZONTAL COUPLING PLANE



VERTICAL COUPLING PLANE

8.3 RF Electromagnetic Field Immunity Test



FRONT VIEW (80-1000MHZ)



FRONT VIEW (1400-2700MHZ)



BACK VIEW



VIEW IN MONITOR

APPENDIX

PHOTOGRAPHS OF EUT

*FIGURE 1
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
GENERAL APPEARANCE (FRONT VIEW)*



*FIGURE 2
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
GENERAL APPEARANCE (BACK VIEW)*



FIGURE 3
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
BATTERY BOX



FIGURE 4
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
COVER REMOVED



FIGURE 5
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
SENSOR BOARD

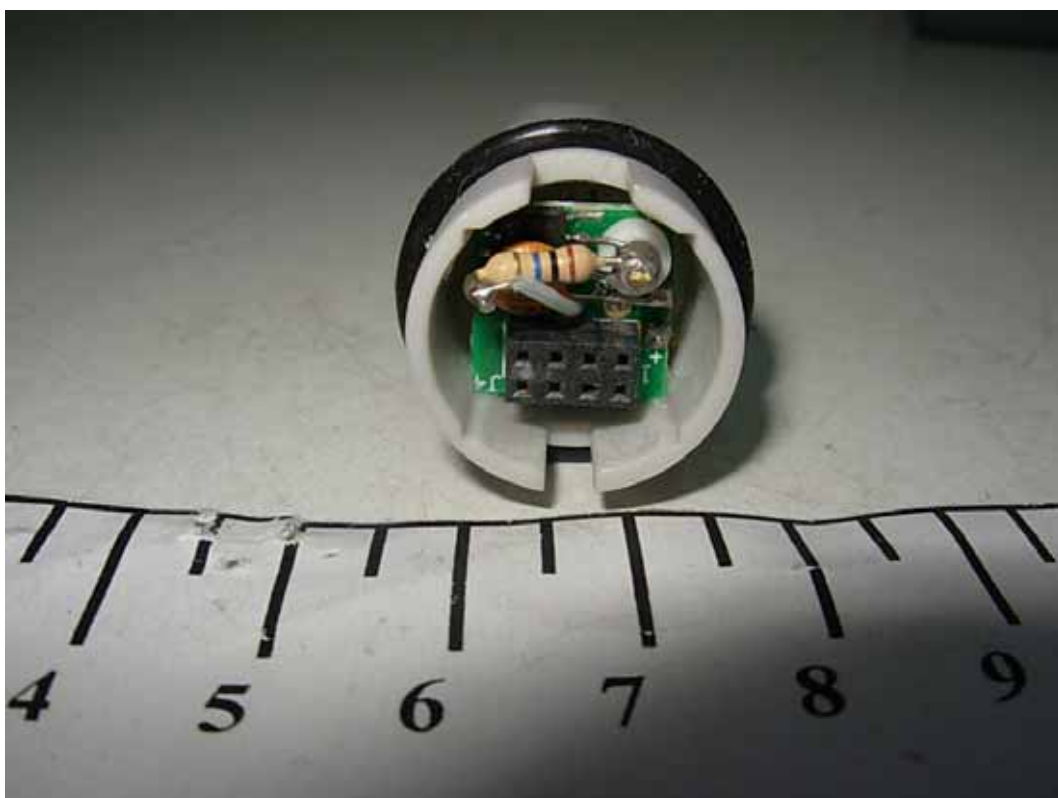


FIGURE 6
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
MAIN BOARD (COMPONENT SIDE)

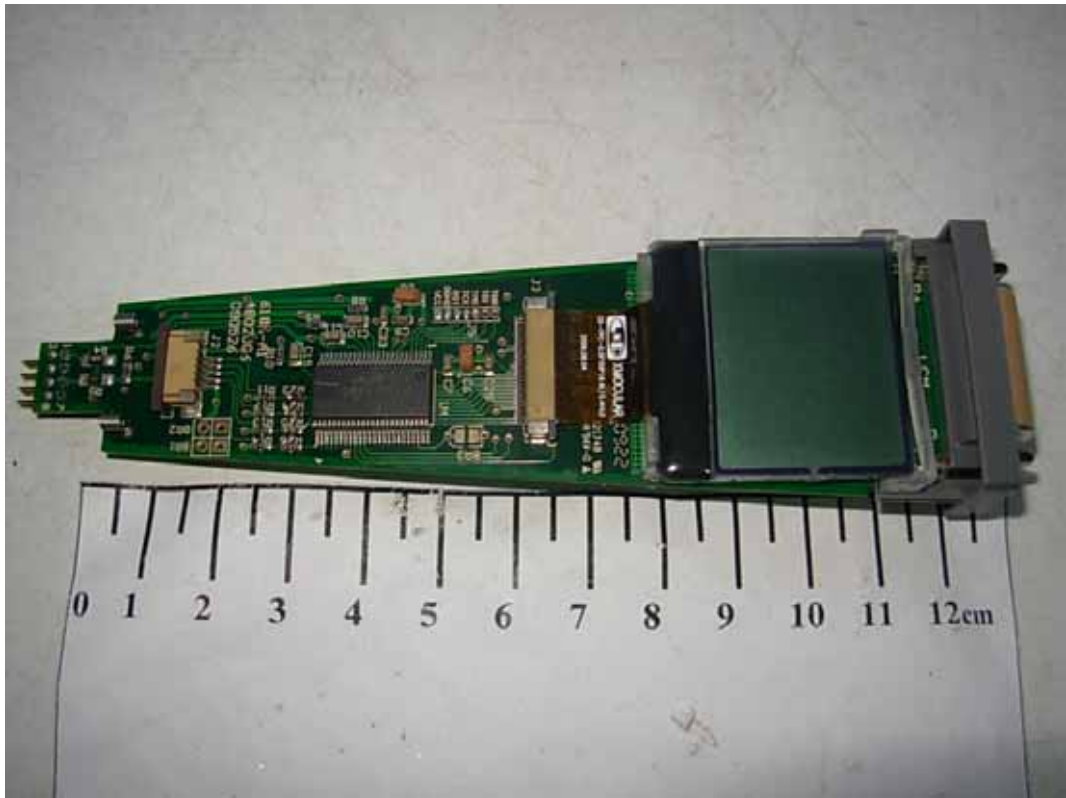


FIGURE 7
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
MAIN BOARD (SOLDERED SIDE)

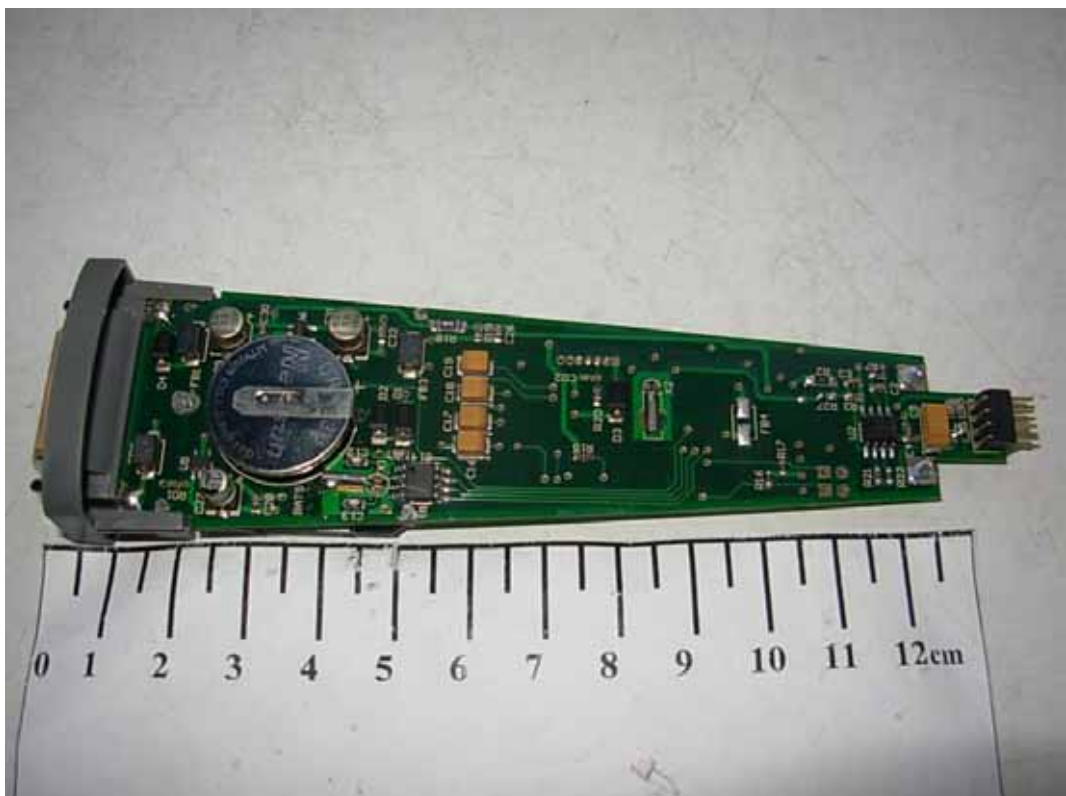


FIGURE 8
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 618N)
CHIP ON MAIN BOARD



FIGURE 9
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 10
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
GENERAL APPEARANCE (BACK VIEW)



FIGURE 11
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
BATTERY BOX



FIGURE 12
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
COVER REMOVED



FIGURE 13
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
SENSOR BOARD

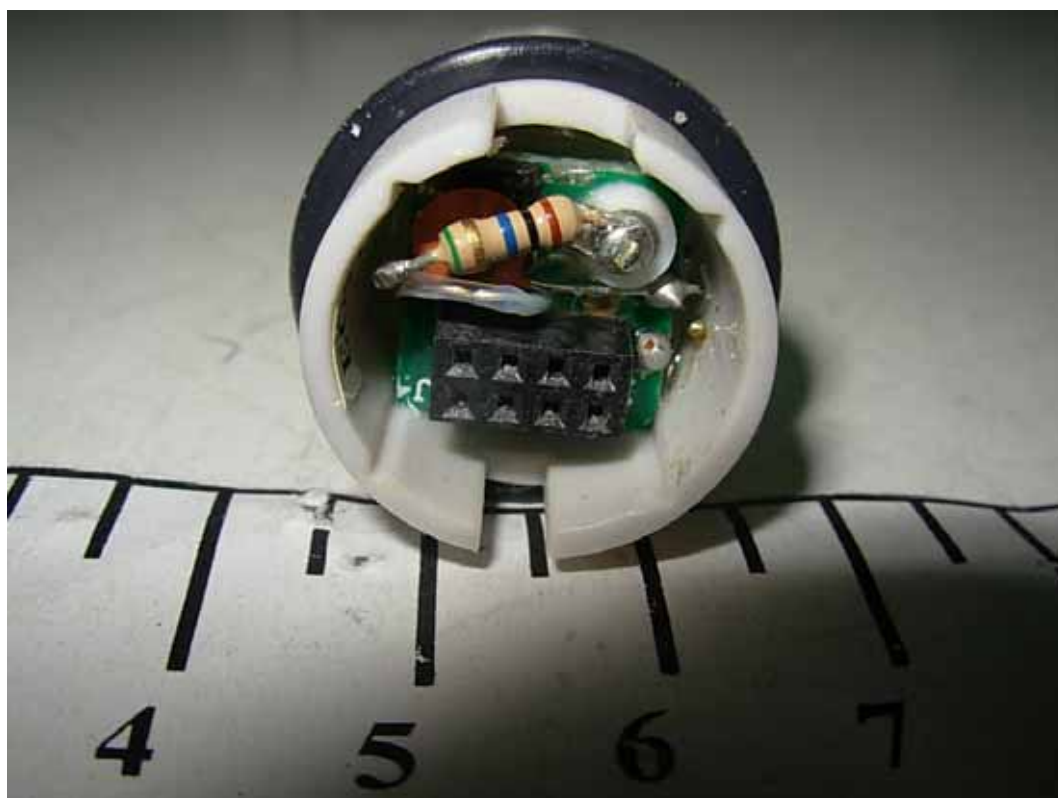


FIGURE 14
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
MAIN BOARD (COMPONENT SIDE)

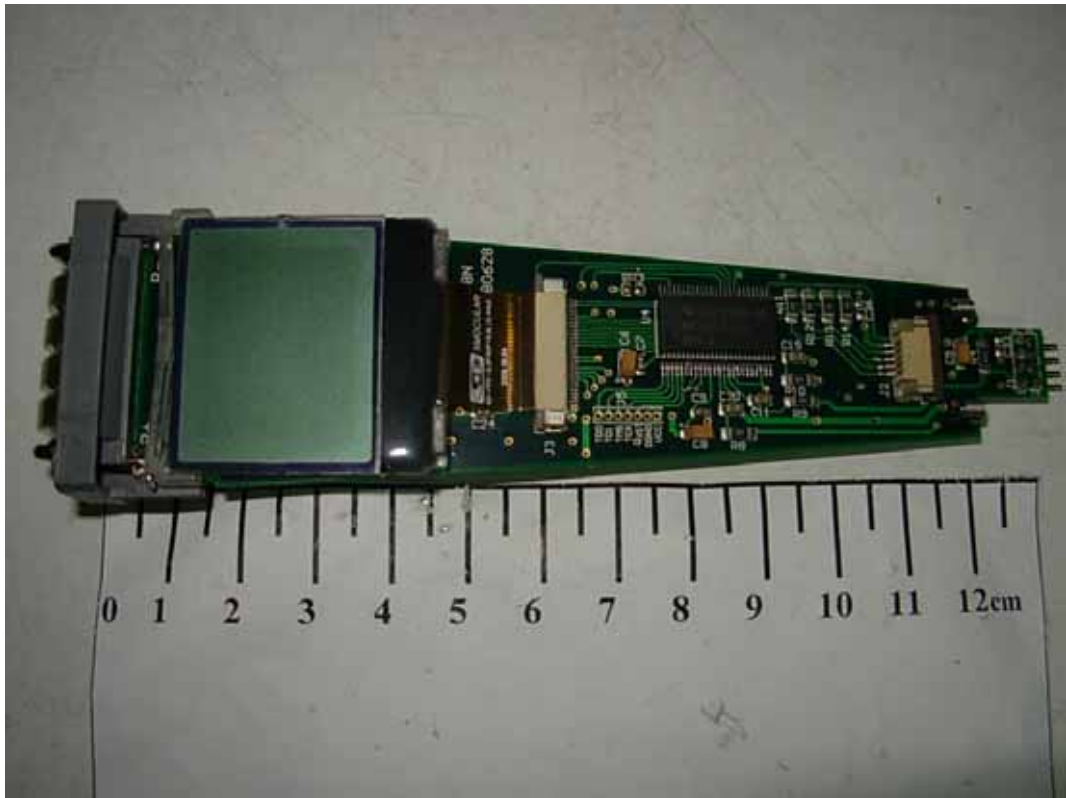


FIGURE 15
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
MAIN BOARD (SOLDERED SIDE)

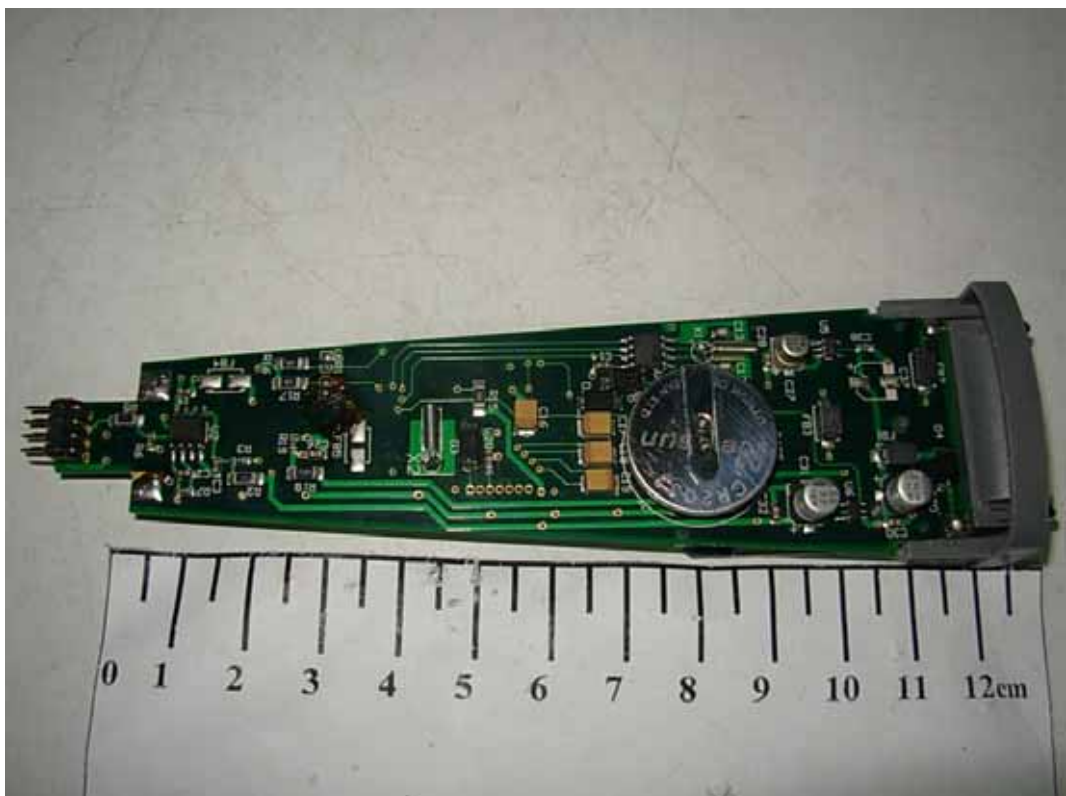


FIGURE 16
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 619)
CHIP ON MAIN BOARD



FIGURE 17
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 18
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
GENERAL APPEARANCE (BACK VIEW)



FIGURE 19
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
BATTERY BOX



FIGURE 20
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
COVER REMOVED



FIGURE 21
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
SENSOR BOARD

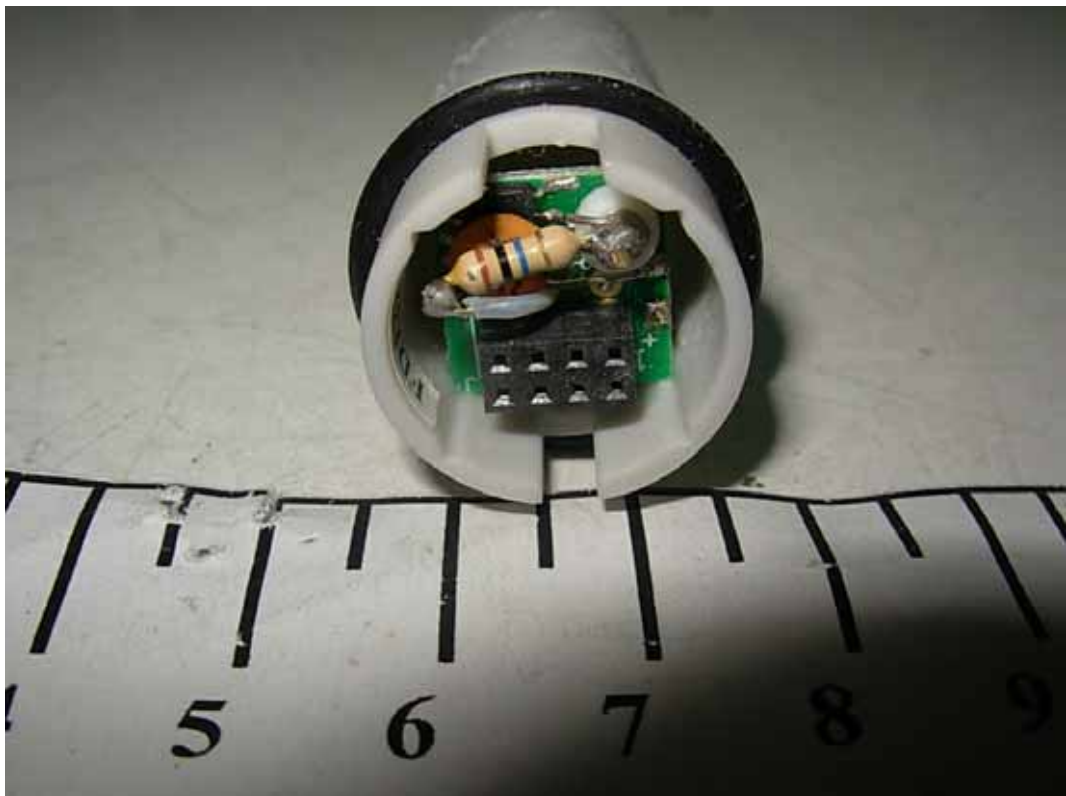


FIGURE 22
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
MAIN BOARD (COMPONENT SIDE)

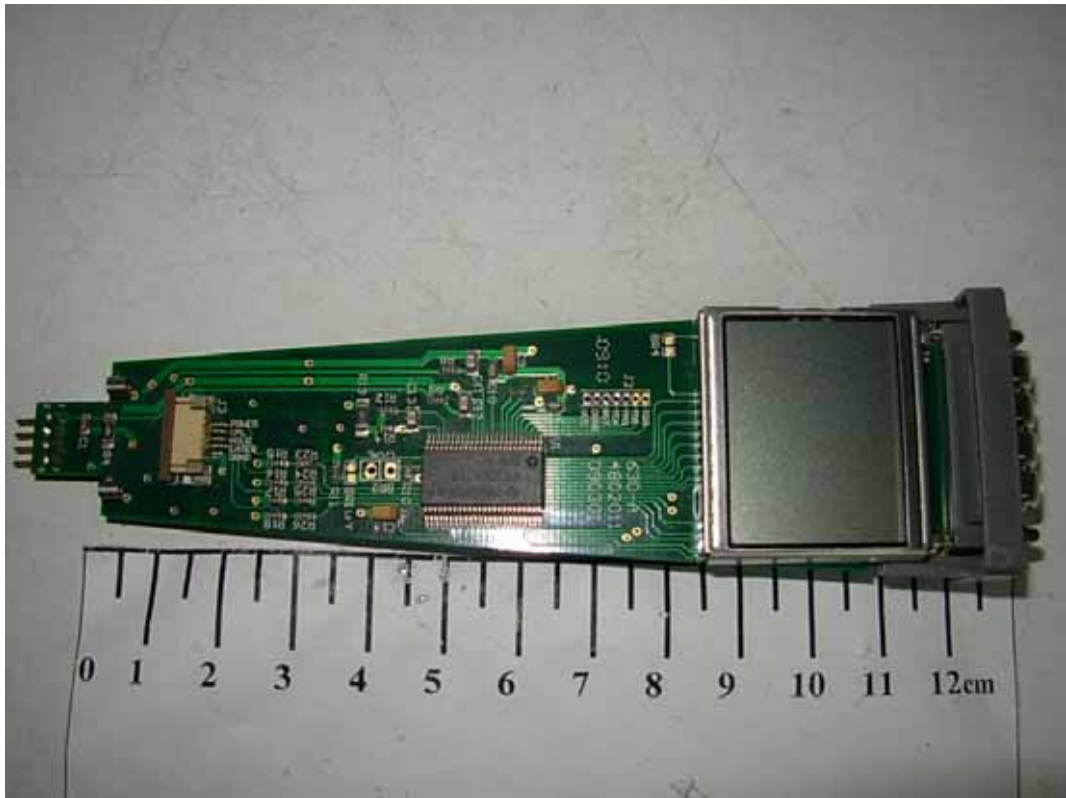


FIGURE 23
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
MAIN BOARD (SOLDERED SIDE)

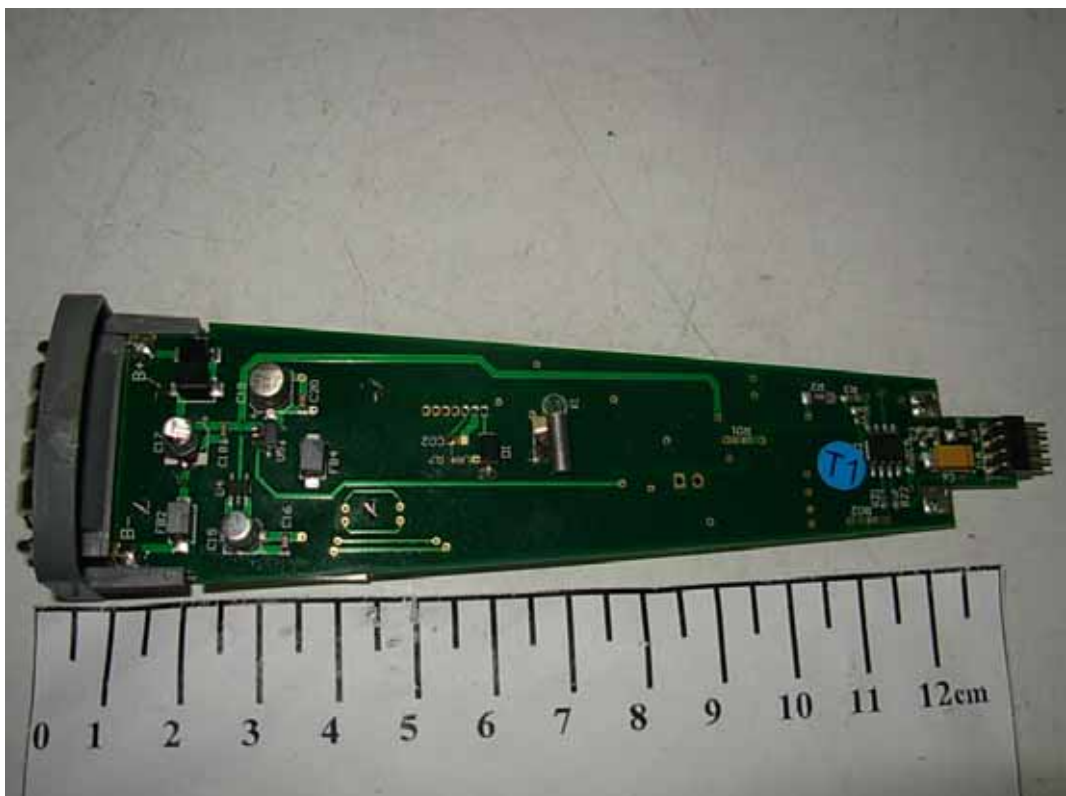


FIGURE 24
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 630)
CHIP ON MAIN BOARD



FIGURE 25
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 26
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
GENERAL APPEARANCE (BACK VIEW)



FIGURE 27
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
BATTERY BOX



FIGURE 28
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
COVER REMOVED



FIGURE 29
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
SENSOR BOARD



FIGURE 30
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
MAIN BOARD (COMPONENT SIDE)

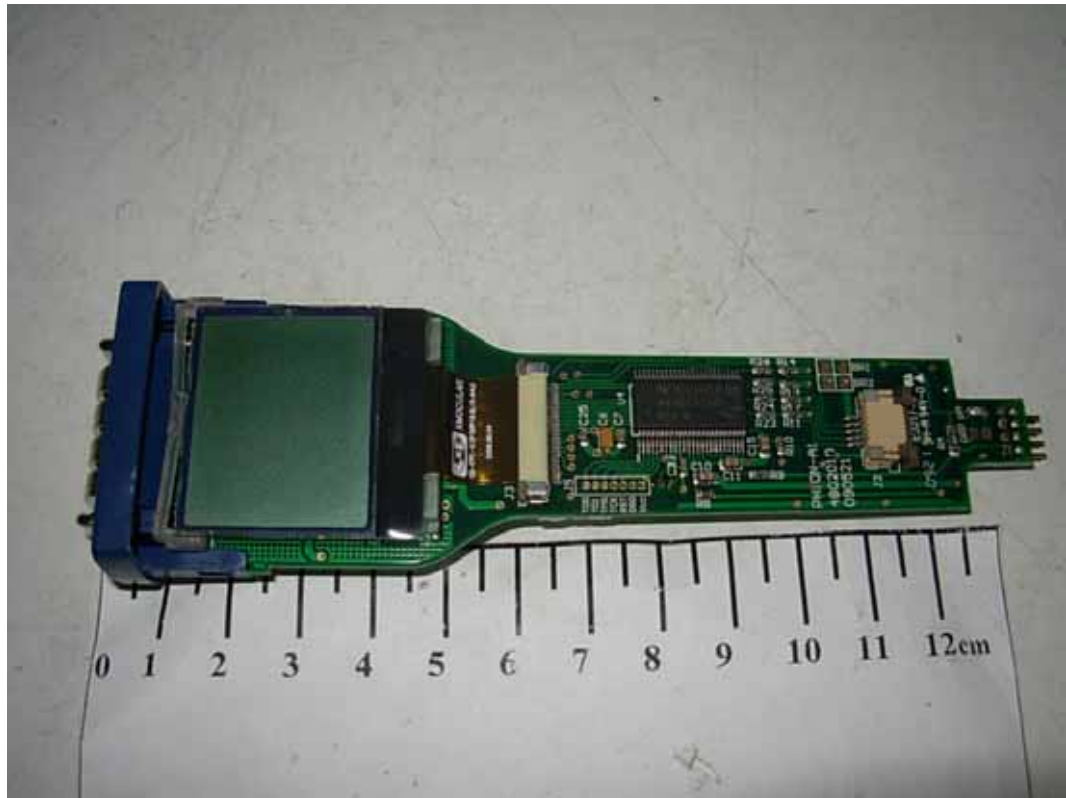


FIGURE 31
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
MAIN BOARD (SOLDERED SIDE)

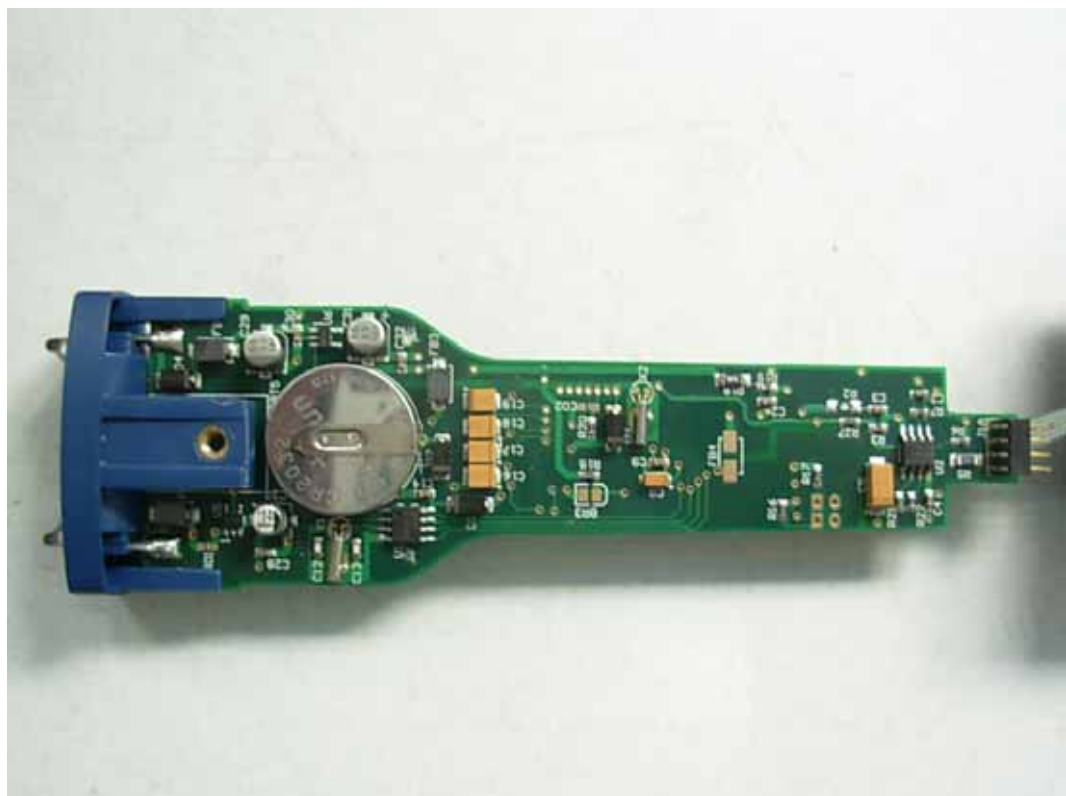


FIGURE 32
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10N)
CHIP ON MAIN BOARD



*FIGURE 33
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
GENERAL APPEARANCE (FRONT VIEW)*



*FIGURE 34
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
GENERAL APPEARANCE (BACK VIEW)*



FIGURE 35
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
BATTERY BOX



FIGURE 36
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
COVER REMOVED



FIGURE 37
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
SENSOR BOARD

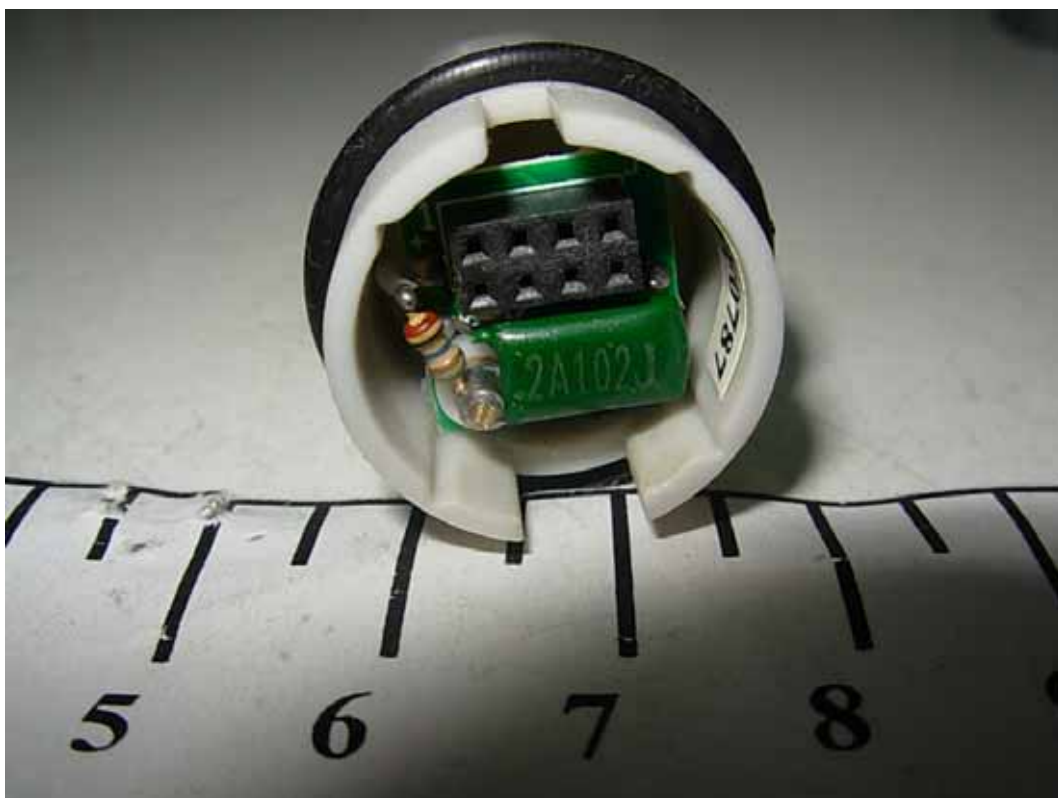


FIGURE 38
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
MAIN BOARD (COMPONENT SIDE)

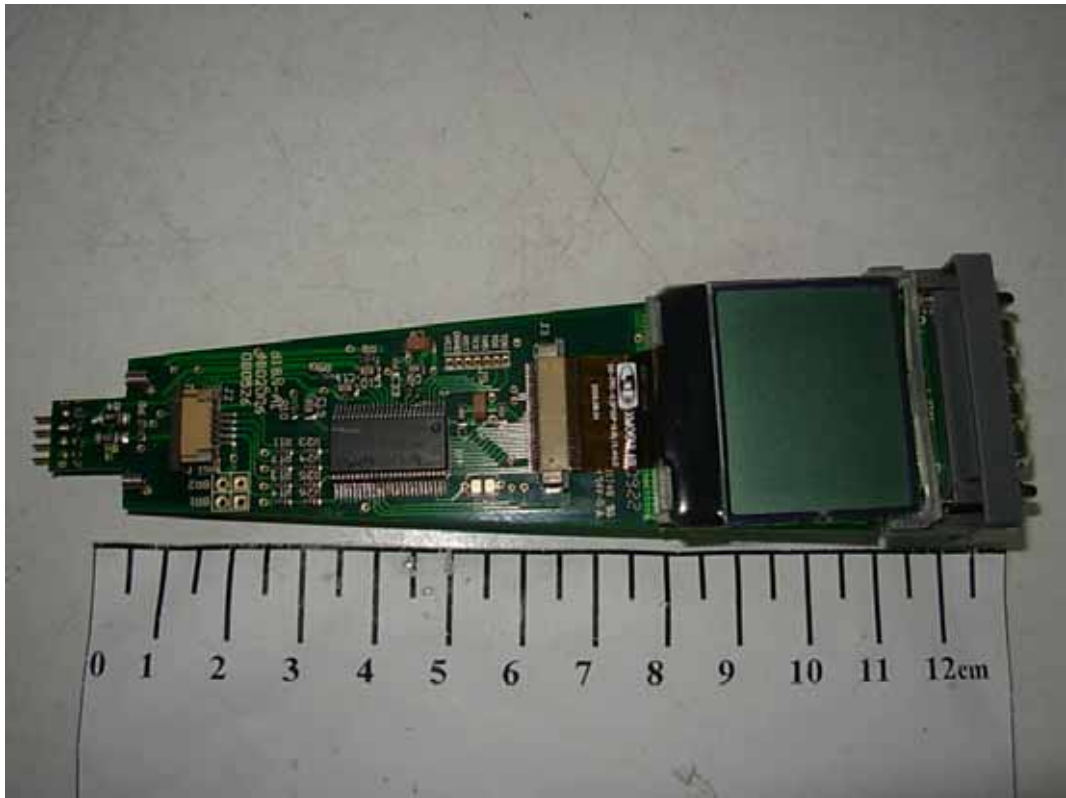


FIGURE 39
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
MAIN BOARD (SOLDERED SIDE)

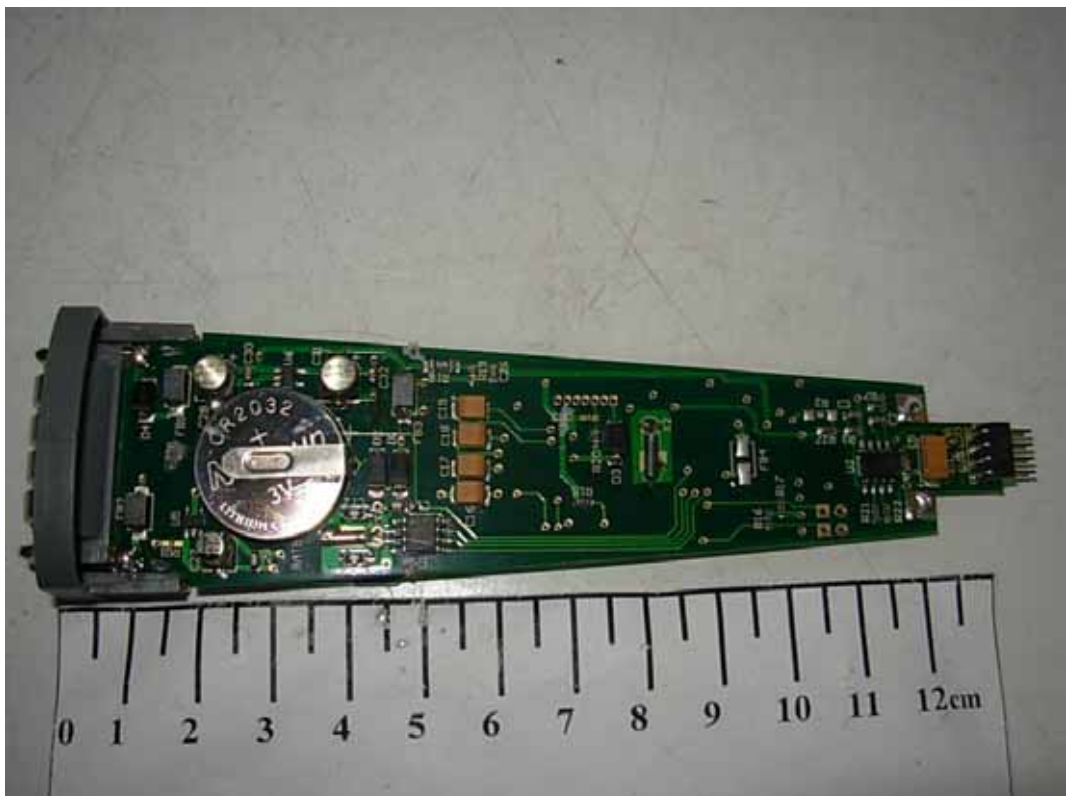
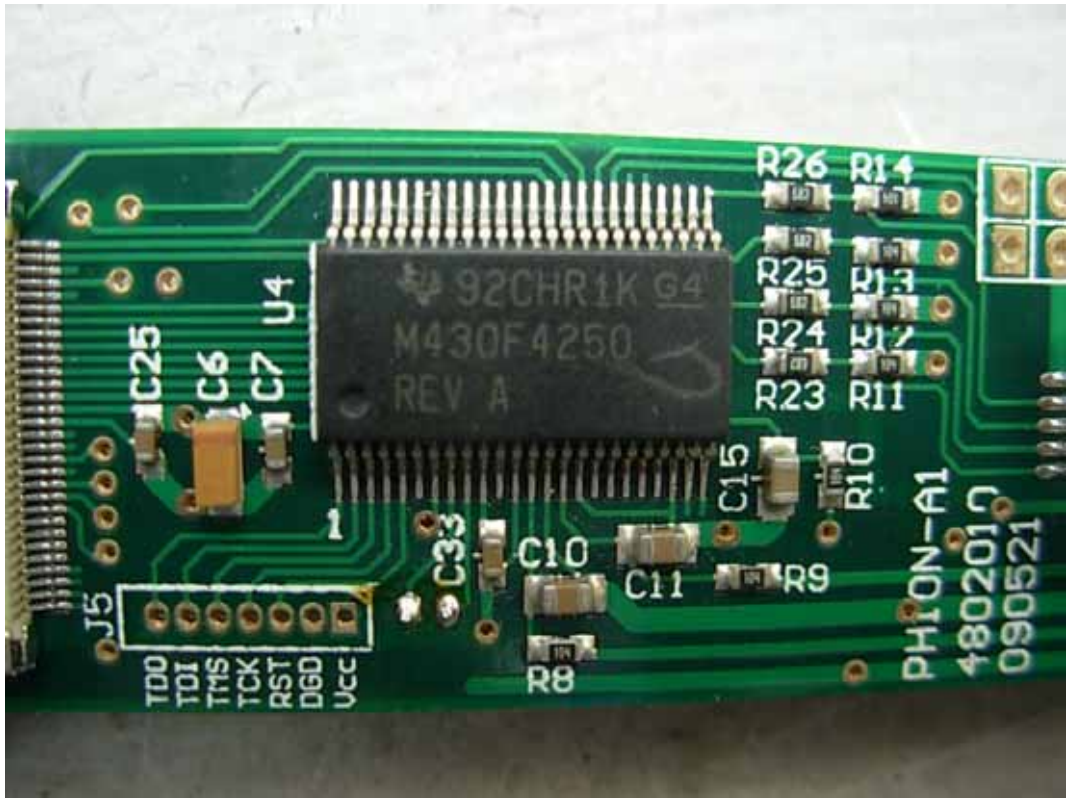


FIGURE 40
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: 628N)
MAIN BOARD (SOLDERED SIDE)



*FIGURE 41
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
GENERAL APPEARANCE (FRONT VIEW)*



*FIGURE 42
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
GENERAL APPEARANCE (BACK VIEW)*

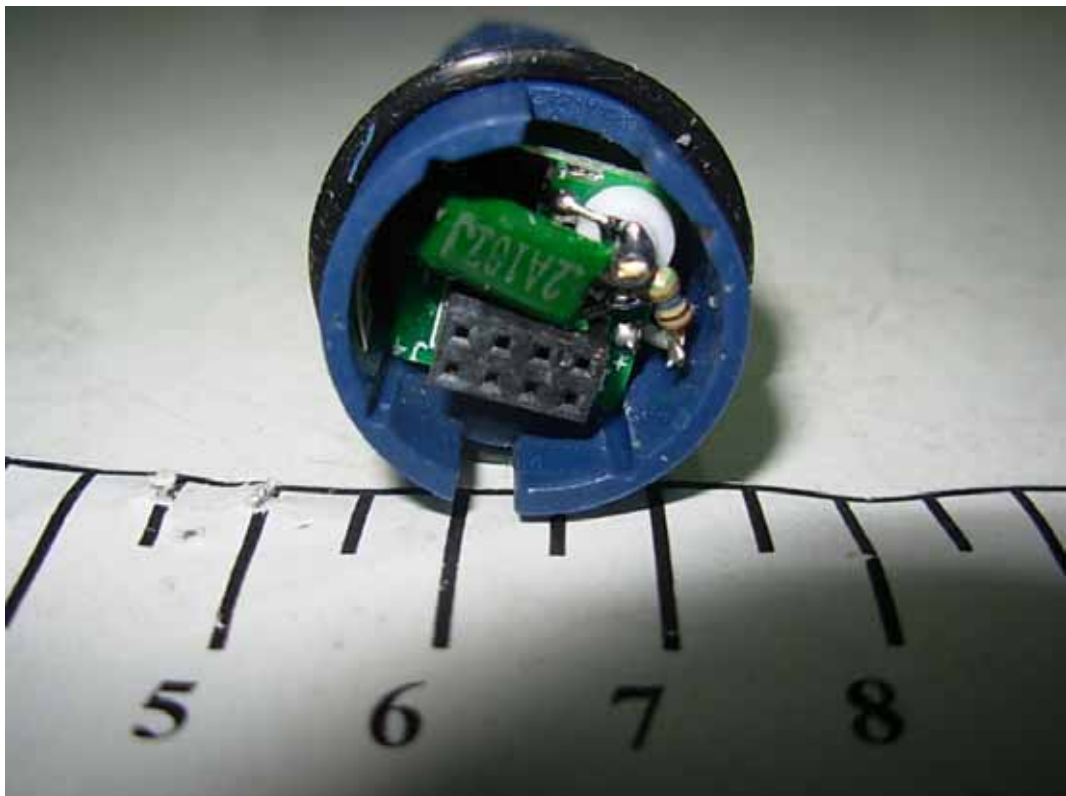




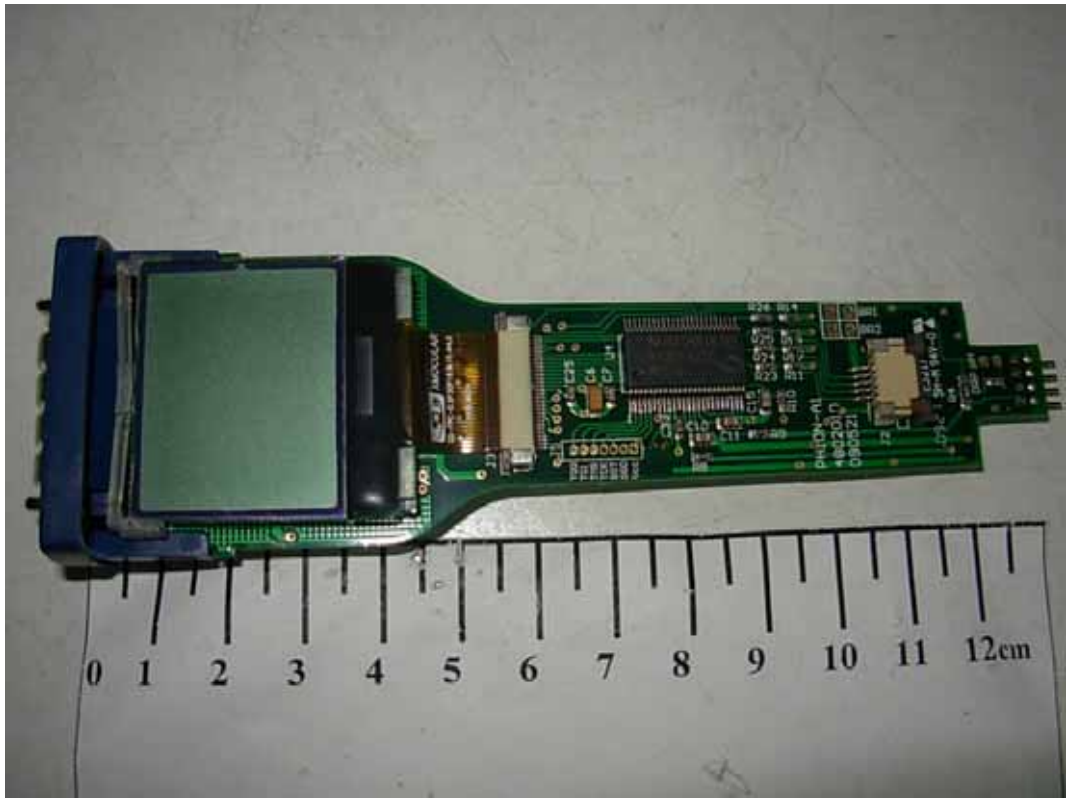
FIGURE 43
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
COVER REMOVED



FIGURE 44
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
SENSOR BOARD



*FIGURE 45
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
MAIN BOARD (COMPONENT SIDE)*



*FIGURE 46
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
MAIN BOARD (SOLDERED SIDE)*

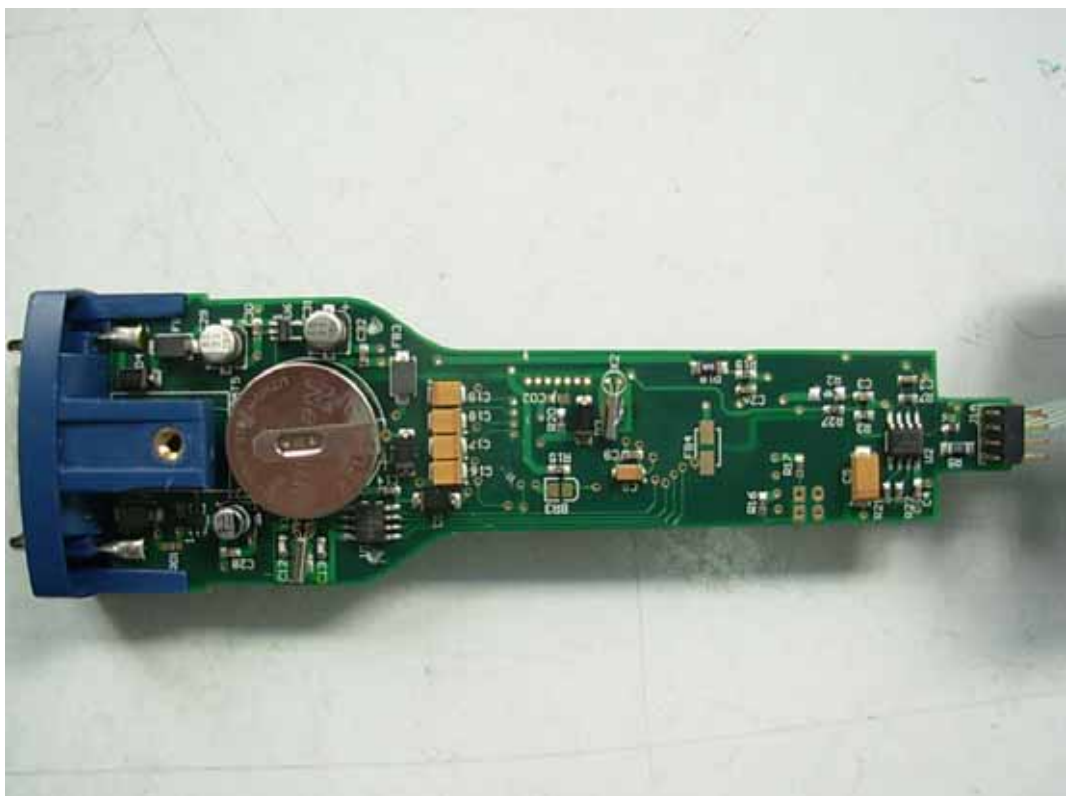


FIGURE 47
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15N)
CHIP ON MAIN BOARD



FIGURE 48
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 49
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 50
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: pH10)
LABEL



FIGURE 51
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10A)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 52
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: PH10A)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 53
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: pH10A)
LABEL



FIGURE 54
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 55
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15)
GENERAL APPEARANCE (FRONT VIEW)



FIGURE 56
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15)
LABEL



*FIGURE 57
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15A)
GENERAL APPEARANCE (FRONT VIEW)*



*FIGURE 58
PH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15A)
GENERAL APPEARANCE (FRONT VIEW)*



FIGURE 59
pH & TEMPERATURE/ORP & TEMPERATURE POCKET METER (M/N: ORP15A)
LABEL

